Literature-derived Bioaccumulation Models for Energetic Compounds in Plants and Soil Invertebrates

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EXECUTIVE SUMMARY

Concentrations of contaminants in tissue are needed to estimate exposure of wildlife. In the absence of measured data, models are used. Soil-to-plant tissue bioaccumulation models for 10 energetic compounds [HMX, perchlorate, RDX, tetryl, TNB, TNT, and its metabolites (2-ADNT, 4-ADNT, 2,4-DNT, and 2,6-DNT)] representing 4 plant tissue types (leaf, root, fruit, and seed), and soil-to-whole-body earthworm bioaccumulation models for 8 energetic compounds [HMX, perchlorate, RDX, TNT, and its metabolites (2,4-DANT, 2,6-DANT, 2-ADNT, and 4-ADNT)] were developed. Models were developed based on data extracted from published, peer-reviewed literature and gray literature. Data were pooled by chemical, taxonomic groups, and tissue types to determine whether linear relationships between chemical concentrations in soil and in biota (plant tissues and earthworms) existed. All together, 36 soil-to-tissue combinations were analyzed and presented in this report.

For plants, six of ten chemicals (2-ADNT, 4-ADNT, 2,6-DNT, HMX, RDX, and TNT) had significant natural log-linear relationships between soil to at least one plant tissue tissue type.Whereas positive relationships were observed for 2-ADNT, 2,6-DNT, HMX, and RDX, inverse relationships were obtained for TNT in soil to plant roots and 4-ADNT in soil to plant foliage. Summary statistics of BAFs (ratio of soil to tissue) were generated for all chemical-tissue combinations. Only 2,4-DNT and 4-ADNT had median soil-to-plant foliage BAFs of less than one; the remaining chemicals (2,6-DNT, 2-ADNT, HMX, perchlorate, RDX, tetryl, TNB, and TNT) all had median foliage uptake values greater than one. Three chemicals had soil-to-fruit uptake values (RDX, tetryl, and TNT). Among these three analytes, RDX was the only chemical that had a median soil-to-fruit uptake value of greater than one. Median soil-to-root uptake values for RDX, tetryl, and TNT were greater than one. Among the four chemicals with uptake data for seeds (perchlorate, RDX, tetryl, and TNT), only RDX and tertyl had median uptake values greater than one.

For soil-to-earthworm, four chemicals (RDX, perchlorate, 2-ADNT, and 4-ADNT) had statistically significant log-linear relationships between soil to earthworms. Whereas RDX, 2-ADNT, and 4-ADNT displayed positive relationships, that for perchlorate was negative. Summary statistics of BAFs (ratio of soil to earthworms) were generated for all analytes. Five chemicals pairs: HMX in soil to HMX in earthworms, TNT-to-TNT, perchlorate-to-perchlorate, TNT-to-2ADNT, and TNT-to-4ADNT had median soil-to-tissue BAFs of less than one; the remaining chemical pairs: HMX/HMX, perchlorate/perchlorate, RDX/RDX, TNT/2-ADNT, TNT/2,4-DANT, 2,4-DANT/2,4-DANT, 2,6-DANT/2,6-DANT, 2ADNT/2ADNT, and 4ADNT/4ADNT all had median uptake values of greater than one.

1. INTRODUCTION

Estimation of the risks that soil contamination presents to herbivorous and vermivorous (e.g., earthworm-eating) wildlife requires measuring the contaminant concentration in terrestrial biota. These data may be acquired either by direct measurement or estimation. Direct measurement consists of collecting and analyzing contaminant concentrations in biota tissues from contaminated sites. Because this approach provides information on the actual contaminant loading in on-site earthworms, direct measurement contributes the least uncertainty to exposure estimates and is therefore the preferred approach. However, for various reasons (incompatible sampling schedule; insufficient time, personnel, or finances to support field sampling, etc.), direct measurement may not be feasible. When direct measurement of contaminants is not possible, estimation is the only alternative.

Contaminant loads in terrestrial biota may be estimated using uptake factors (UFs) or empirically derived bioaccumulation models. UFs, the ratios of contaminant concentrations in biota to those in soil, are the simplest method for estimating contaminant loads in biota. In practice, if the contaminant concentration in soil is known (likely in almost all retrospective ecological risk assessments), the concentration in biota may be estimated by multiplying the soil concentration by the UF. The use of UFs depends on the assumption that the concentration of chemicals in organisms is a linear, no-threshold function of concentrations in soil. This is expected to be the case for xenobiotic chemicals like PCBs that are passively accumulated and not metabolized to any significant extent. It will not be the case if the chemical in question is well-regulated by the organism, either because it is an essential nutrient or because it is a toxicant with effective inducible mechanisms for metabolism or excretion. Such regulated chemicals will, within the effective concentration range for the mechanism, have nearly constant concentrations in biota regardless of soil concentrations, except at deficient concentrations. Various complex patterns are also possible due to lack of induction at low concentrations, saturation kinetics at high concentrations, toxicity at high concentrations, or other processes. Despite these situations that lead to violation of the assumptions, UFs are commonly used in risk assessments.

Regression models are another approach to estimating contaminant concentrations in biota. These models are generally simple linear or log-linear regressions of the soil contaminant concentration on the biota concentration. While there has been considerable research concerning the uptake of soil contaminants by plants and earthworms, most studies use data from a limited number of locations and focus on a limited number of analytes. The purpose of this report was to assemble two sets of database of soil-to-earthworm and soil-to-plant contaminant concentration data from published literature, develop UFs and linear regression bioaccumulation models from these data for energetic compounds.

In this report, both UFs and regression models were developed, because, while regression models are most likely to consistently provide the best estimate of biota body burdens, UFs are required by some regulatory agencies. In addition, when no regression model fits the uptake data well, a conservative UF may be employed in screening assessments to determine whether site-specific studies are needed. The models presented in this report will facilitate the more accurate estimation of contaminant exposure experienced by herbivores and earthworm-consuming wildlife.

2. DATABASE DEVELOPMENT

2.1. Plant Bioaccumulation Database

This investigation evaluated data for 10 energetic compounds with soil-to-plant tissue uptake studies representing 4 plant tissues (leaf, root, fruit, and seed) and resulted in 25 soil-to-tissue combinations. The 10 energetic compounds were: HMX, perchlorate, RDX, Tetryl, TNB, TNT and its metabolites (2-ADNT, 4-ADNT, 2,4-DNT, and 2,6-DNT) (Table 2.1-1). Studies were primarily from greenhouse pot studies in which chemicals were added to soil.

2.1. Earthworm Bioaccumulation Database

The soil invertebrate bioaccumulation dataset consisted entirely of earthworm species from 3 different genera: Aporrectodea, Eisenia, and Lumbricus. Our investigation covered 8 energetic compounds [HMX, perchlorate, RDX, TNT, and its metabolite (2,4-DANT, 2,6-DANT, 2-ADNT, and 4-ADNT)] in whole-body tissues of earthworms. Because some of the studies measured TNT metabolites in earthworms, the database contained a total of 11 soil-to-earthworm combinations that arised from parent compounds in soil to parent or metabolites in earthworm. Studies were primarily from laboratory investigations in which chemicals were added to soil.

2.2 Data Treatment

Soil and tissue concentrations were expressed in dry-weight basis (and converted to dry weight if the reported concentration were originally in wet weight concentrations). As a result, summary statistics and regression analysis were all based on dry weight basis for soil and biota concentrations. Perchlorate studies were frequently performed on perchlorate salts and expressed as salt concentrations. To facilitate comparisons os data from different studies, concentrations were all converted to perchlorate anions. Although most studies reported that plant material was washed, studies were not excluded if the extent of washing was not stated in the paper. Studies were used even if the individual investigators observed no correlation between concentrations of contaminants in soils and plants. Concentrations of chemicals in soil or plants were sometimes estimated visually from a figure if contacts with authors were unsuccessful. Measured concentrations were preferred over nominal soil concentrations, but nominal concentrations were included in the database if measured concentration were not available. Soil and biota measurements were quantified by HPLC coupled with UV detector or GC/MS; only one study quantified chemical concentrations using HPLC alone. Thus, quantitation measurements were considered adequate.

2.3 Organization of the Database: Plant and Earthworm Dataset

The bioaccumulation database which includes soil and biota (plant and earthworm) concentrations, soil parameters, exposure time, chemical form, dry or wet weight, extraction method, and species information are presented in Appendix A-1 (plant) and A-2 (earthworm). Each plant and earthworm species, taxonomic classification, soil type, location, concentration of the test chemical in soil, and form of an added chemical represents an independent observation in the dataset. For plants, differences in above-ground plant tissue (e.g. seed vs. leaf) were considered as separate soil-to-plant tissue combinations. Concentrations of contaminants in soil at the time of biota sampling were used if known because it most closely represents soil concentrations and plant tissue concentrations at a site and for a site-specific risk assessment. If these final concentrations were not measured (as was often the case in greenhouse pot studies), the initial concentration of the chemical measured in soil or nominal soil concentration was assumed to be equivalent to the final concentration. It was assumed that the soils used were free from contaminants prior to the addition of test compounds. In field experiments where soil and tissues of resident biota were analyzed, the change in soil concentration of a chemical over time was assumed to have reached equilibrium.

Detailed summaries of experimental conditions, analytical methods used, and relevant notes for the purpose of this investigation were summarized for each data source and presented in Appendix B-1 (for plants) and B-2 (for earthworms).

2.4 Data Analysis: Plant and Earthworm BAFs

To evaluate if a linear relationship between the chemical concentration in soil and that in terrestrial biota existed, simple linear regressions were performed using SAS PROC REG (SAS Inst. Inc. 1999). Chemical concentrations in both soil and biota tissues were transformed to natural-log (ln) prior to regression analyses. Because data concerning the number of individuals included in composites or means were not available for all observations, no weighting of observations was applied. Summary statistics of BAF values (min, max, median, and 90^{th} percentile) were provided. For plants, a distinction was made in the dataset between monocot and dicot species, and analysis of dicot and monocot data were analyzed separately as well as pooled in the summary and ln-ln regression analysis.

3. RESULTS OF BIOACCUMULATION MODELS

3.1. Soil-to-Plant Tissue BAF Models

Table 3.1-1 presented a summary of soil-to-plant tissue BAF values and the result of the log-log regression model. The level of significance was based on alpha of 0.05.

The results of the bioaccumulation analyses are summarized from Table 3.1-1 based on pooled monocot and dicot (indicated as "all" in the database) as follows:

- Among all the chemicals examined, only two chemicals (2,4-DNT and 4-ADNT) have a median soil-to-plant foliage uptake of less than one; the remaining chemicals (2,6-DNT, 2ADNT, HMX, perchlorate anion, RDX, Tetryl, TNB, and TNT) all have median uptake values of greater than one.
- Only 3 chemicals have soil-to-fruit uptake values (RDX, tetryl, and TNT). RDX is the only chemical that have a median uptake value of soil-to-fruit greater than one.
- Six chemicals have soil-to-root uptake values (2-ADNT, 4-ADNT, HMX, RDX, Tetryl, and TNT). Tetryl and TNT have median uptake values greater than one.
- Of the four chemicals with uptake data from soil to seed (perchlorate, RDX, Tetryl, and TNT), only RDX and Tertyl have median uptake values greater than one.
- RDX has median uptake values for all plant tissue compartments (foliage, fruit, and seed), except for root at a median value of 0.73.

Six chemicals (2-ADNT, 2,6-DNT, HMX, RDX, and TNT) have significant log-linear relationships between soil to at least one plant tissue compartment (Table 3.1-1). All were positive with the exception of TNT and 4-ADNT, which displayed inversely proportional relationships. Figure 3.1-1 through 3.1-25 presented the scatter plots and regression models (when applicable) of the soil-to-plant tissue data. Results of the log-log regression analyses for soil-to-plant bioaccumulation are summarized as follows:

- Five chemicals (2-ADNT, 4-ADNT, HMX, RDX, and perchlorate) have significant log-linear relationship between soil to at least one plant tissue compartment when plant species are separately analyzed by monocots and dicots.
- Six chemicals (2-ADNT, 4-ADNT, HMX, perchlorate, RDX, and TNT) have significant log-linear relationships between soil to at least one plant tissue compartment when monocot and dicot plant uptake data are pooled.
- For chemicals with statistically significant relationships, concentrations in tissue are proportional to chemicals in soil concentration. However, linear relationship between plant tissue concentration and soil concentrations are inversely proportional for TNT in soil to TNT in plant root, and for 4-ADNT in soil to 4-ADNT in foliage.

3.1. Soil-to-Earthworm BAF Model

Table 3.1-2 presents a summary of soil-to-earthworm BAF values and the results of the log-log regression analyses. The level of significance was based on alpha of 0.05.

Among all chemicals examined, 5 chemicals pairs: HMX in soil to HMX in earthworms, perchlorate-to-perchlorate, TNT-to-TNT, TNT-to-2ADNT, and TNT-to-4ADNT had median soil-to-tissue BAFs of less than one. The remaining 6 chemical pairs (2ADNT/2ADNT, 4ADNT/4ADNT, RDX/RDX, TNT/2,4-DANT, 2,4-DANT/2,4-DANT, and 2,6-DANT/2,6-DANT] all had median uptake values of greater than one.

Four chemicals (RDX, perchlorate, 2-ADNT, and 4-ADNT) had statistically significant log-linear relationships between soil and earthworms; inversely proportional relationships were found for perchlorate. Figures 3.2-1 through 3.2-11 present the scatter plots and regression models (when applicable) of the soil-to-earthworm data.

4. REFERENCE

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Table 2.1-1. Full Name and Short Name of Energetic Compound

CAS NO.	Full Name	Short Name
121-14-2	2,4-dinitrotoluene	2,4-DNT
606-20-2	2,6-dinitrotoluene	2,6-DNT
35572-78-2	2-amino-4,6-dinitrotoluene	2-ADNT (2-amino-DNT)
19406-51-0	4-amino-2,6-dinitrotoluene	4-ADNT (4-amino-DNT)
2691-41-0	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	HMX
14797-73-0	Perchlorate	Perchlorate
121-82-4	Hexahydro-1,3,5-trinitro-1,3,5-triazine	RDX
479-45-8	2,4,6-trinitrophenylmethylnitramine	Tetryl
99-35-4	1,3,5-trinitrobenzene	TNB
118-96-7	2,4,6-trinitrotoluene	TNT

Table 3.1-1. Summary Statistics of Uptake Values and Regression Results in Plants

Figure NO.	Parent Analyte	Compound in Plant Tissue	Tissue	Monocot/ Dicot	Taxonomic Coverage - Number of representatives in each level included in bioccumulation dataset				BAF Summary Statistics							Range of Detected Concentrations		Results of Regression Analyses of Natural-log transformed concentration data				
					Order	Family	Genus	Species	n	mean	std	min	median	p90	max	Soil	Plant Tissue	Intercept	Slope	Root Mean Square Error	p	r2
Figure 2.1-1	2,4-DNT	2,4-DNT	Foliage	Monocot	1	1	1	1	1	0.607		0.607	0.607	0.607	0.607	5.6	3.4	1.224	0			
	2,4-DNT	2,4-DNT	Foliage	Dicot	1	1	1	1	1	0.146		0.146	0.146	0.146	0.146	15.8	2.3	0.8329	0			
	2,4-DNT	2,4-DNT	Foliage	All	2	2	2	2	2	0.376	0.326	0.146	0.376	0.607	0.607	5.6 - 15.8	2.3 - 3.4	1.873	-0.3768			
Figure 2.1-2	2,6-DNT	2,6-DNT	Foliage	Monocot	1	1	2	2	5	3.24	2.89	0.592	2.94	8.00	8.00	0.5 - 13	4 - 11	1.760	0.2420	0.2956	0.1300	0.5900
	2,6-DNT	2,6-DNT	Foliage	Dicot	1	1	1	1	3	5.83	4.90	1.26	5.22	11	11	0.4 - 4.6	3.4 - 24	1.708	0.4742	1.230	0.6100	0.3300
	2,6-DNT	2,6-DNT	Foliage	All	2	2	3	3	8	4.21	3.66	0.592	3.14	11	11	0.4 - 13	3.4 - 24	1.725	0.3057	0.5656	0.1300	0.3400
Figure 2.1-3	2ADNT	2ADNT	Foliage	Monocot	1	1	1	1	29	2.38	2.41	0.0692	1.46	7.50	8.18	0.26 - 21	0.64 - 18	0.8777	0.3026	0.8657	0.03800	0.1500
	2ADNT	2ADNT	Foliage	All	1	1	1	1	29	2.38	2.41	0.0692	1.46	7.50	8.18	0.26 - 21	0.64 - 18	0.8777	0.3026	0.8657	0.04000	0.1500
Figure 2.1-4	2ADNT	2ADNT	Root	Monocot	1	1	1	1	6	0.00128	0.00168	0.000111	0.000653	0.00460	0.00460	278 - 39400	1.13 - 7.71	-1.445	0.3021	0.6520	0.1700	0.4100
	2ADNT	2ADNT	Root	Dicot	1	1	1	1	1	0.000184		0.000184	0.000184	0.000184	0.000184	6260	1.15	0.1398	0			
	2ADNT	2ADNT	Root	All	2	2	2	2	7	0.00112	0.00159	0.000111	0.000599	0.00460	0.00460	278 - 39400	1.13 - 7.71	-1.385	0.2771	0.7279	0.2300	0.2700
Figure 2.1-5	4ADNT	4ADNT	Foliage	Monocot	1	1	1	1	43	0.826	1.06	0.00755	0.296	2.80	3.33	1.9 - 110	0.64 - 25	1.774	-0.3098	0.8929	0.01400	0.1400
	4ADNT	4ADNT	Foliage	All	1	1	1	1	43	0.826	1.06	0.00755	0.296	2.80	3.33	1.9 - 110	0.64 - 25	1.774	-0.3098	0.8929	0.01400	0.1400
Figure 2.1-6	4ADNT	4ADNT	Root	Monocot	1	1	1	1	7	0.00103	0.00102	0.0000945	0.000685	0.00317	0.00317	278 - 39400	0.63 - 5.71	-2.596	0.4165	0.5060	0.02000	0.7000
	4ADNT	4ADNT	Root	Dicot	1	1	1	1	2	0.000749	0.000580	0.000339	0.000749	0.00116	0.00116	492 - 6260	0.57 - 2.12	-3.763	0.5164			
	4ADNT	4ADNT	Root	All	2	2	2	2	9	0.000964	0.000913	0.0000945	0.000685	0.00317	0.00317	278 - 39400	0.57 - 5.71	-2.966	0.4513	0.4725	0.003400	0.7300
Figure 2.1-7	HMX	HMX	Foliage	Monocot	1	2	6	6	23	3.52	4.20	0.125	2.80	6.50	17.8	1.01 - 9160	10.1 - 9160	1.818	0.7458	0.8323	0.0001000	0.8700
	HMX	HMX	Foliage	Dicot	7	7	10	10	35	30.2	47.3	0.225	1.83	118	131	1.01 - 9850	8 - 9850	3.599	0.2836	1.763	0.06000	0.1000
	HMX	HMX	Foliage	All	8	9	16	16	58	19.6	38.9	0.125	2.15	89.2	131	1.01 - 9850	8 - 9850	2.769	0.5296	1.547	0.0001000	0.4100
Figure 2.1-8	HMX	HMX	Root	Monocot	1	1	2	2	6	0.200	0.0159	0.176	0.205	0.216	0.216	28.3 - 30.2	5.3 - 6.1	4.866	-0.9197	0.05146	0.2300	0.3300
	HMX	HMX	Root	Dicot	2	2	2	2	6	0.252	0.0463	0.192	0.253	0.318	0.318	28.3 - 35.3	6.8 - 9	3.200	-0.3299	0.1026	0.4300	0.1600
	HMX	HMX	Root	All	3	3	4	4	12	0.226	0.0427	0.176	0.212	0.283	0.318	28.3 - 35.3	5.3 - 9	0.5036	0.4123	0.1778	0.4800	0.05000
Figure 2.1-9	Perchlorate	Perchlorate	Foliage	Monocot	1	2	4	4	31	19.4	28.4	0.135	7.32	57.6	96.9	0.453 - 42.4	1.8 - 370	2.935	0.4499	1.495	0.005000	0.2400
	Perchlorate	Perchlorate	Foliage	Dicot	5	6	8	9	27	19.7	20.9	0.237	16.6	46.9	89.6	0.0491 - 591	0.8 - 530	2.132	0.5878	0.7629	0.0001000	0.8900
	Perchlorate	Perchlorate	Foliage	All	6	7	12	13	58	19.5	25	0.135	8.28	53	96.9	0.0491 - 591	0.8 - 530	2.410	0.5891	1.234	0.0001000	0.6700
Figure 2.1-10	Perchlorate	Perchlorate	Seed	Dicot	1	1	1	1	3	0.0688	0.00352	0.0659	0.0676	0.0727	0.0727	591	39 - 43	3.705	0	0.05067	na	na
	Perchlorate	Perchlorate	Seed	All	1	1	1	1	3	0.0688	0.00352	0.0659	0.0676	0.0727	0.0727	591	39 - 43	3.705	0	0.05067	na	na
Figure 2.1-11	RDX	RDX	Foliage	Monocot	1	2	6	6	16	9.29	19.4	0.0144	3.01	44.2	69.9	0.673 - 10200	5 - 5800	2.964	0.5221	1.995	0.007000	0.4100
	RDX	RDX	Foliage	Gymnosper	1	1	1	1	1	2.50		2.50	2.50	2.50	2.50	16.8	42	3.738	0			
	RDX	RDX	Foliage	Dicot	5	5	10	10	27	61	125	0.0345	2.82	243	482	0.673 - 10300	3.6 - 24300	3.811	0.3375	2.453	0.1000	0.1100
	RDX	RDX	Foliage	All	7	8	17	17	44	40.9	101	0.0144	2.78	85	482	0.673 - 10300	3.6 - 24300	3.453	0.4305	2.234	0.0009000	0.2300
Figure 2.1-12	RDX	RDX	Fruit	Dicot	2	2	2	2	5	10.5	7.43	2.07	10	20.2	20.2	7.68 - 50.3	47.7 - 202	4.535	0.04000	0.6529	0.9300	0.003000
	RDX	RDX	Fruit	All	2	2	2	2	5	10.5	7.43	2.07	10	20.2	20.2	7.68 - 50.3	47.7 - 202	4.535	0.04000	0.6529	0.9300	0.002900
Figure 2.1-13	RDX	RDX	Root	Monocot	1	1	1	1	1	0.00878		0.00878	0.00878	0.00878	0.00878	1800	15.8	2.760	0			
	RDX	RDX	Root	Dicot	6	6	9	9	13	5.67	8.71	0.00209	1.28	17.5	26.8	1.6 - 1160	2.3 - 904	3.510	-0.1229	1.865	0.6200	0.02000
	RDX	RDX	Root	All	7	7	10	10	14	5.26	8.50	0.00209	0.728	17.5	26.8	1.6 - 1800	2.3 - 904	3.490	-0.1147	1.786	0.5900	0.02500
Figure 2.1-14	RDX	RDX	Seed	Monocot	1	1	1	1	1	0.360		0.360	0.360	0.360	0.360	50.3	18.1	2.896	0			
	RDX	RDX	Seed	Dicot	1	1	1	1	3	34.7	31.1	4.36	33.2	66.4	66.4	10	43.6 - 664	5.359	0	1.415	na	na
	RDX	RDX	Seed	All	2	2	2	2	4	26.1	30.6	0.360	18.8	66.4	66.4	10 - 50.3	18.1 - 664	8.871	-1.525	1.415	0.2700	0.5300
Figure 2.1-15	Tetryl	Tetryl	Foliage	Monocot	1	1	2	2	12	122	157	1.60	26.1	367	376	10	16 - 3760	5.789	0	1.990	na	na
	Tetryl	Tetryl	Foliage	Dicot	1	1	1	1	6	2.76	2.09	0.930	2.02	6.33	6.33	10	9.3 - 63.3	3.084	0	0.7436	na	na
	Tetryl	Tetryl	Foliage	All	2	2	3	3	18	82.6	139	0.930	8.43	367	376	10	9.3 - 3760	4.887	0	2.108	na	na
Figure 2.1-16	Tetryl	Tetryl	Fruit	Dicot	1	1	1	1	3	0.227	0.0808	0.180	0.180	0.320	0.320	10	1.8 - 3.2	0.7796	0	0.3322	na	na
	Tetryl	Tetryl	Fruit	All	1	1	1	1	3	0.227	0.0808	0.180	0.180	0.320	0.320	10	1.8 - 3.2	0.7796	0	0.3322	na	na
Figure 2.1-17	Tetryl	Tetryl	Root	Monocot	1	1	2	2	12	28.2	35.8	1.86	15.2	92.1	113	10	18.6 - 1130	5.020	0	1.187	na	na
	Tetryl	Tetryl	Root	Dicot	1	1	1	1	3	26	18.1	9.36	23.3	45.2	45.2	10	93.6 - 452	5.368	0	0.7908	na	na
	Tetryl	Tetryl	Root	All	2	2	3	3	15	27.8	32.5	1.86	16.1	92.1	113	10	18.6 - 1130	5.089	0	1.103	na	na
Figure 2.1-18	Tetryl	Tetryl	Seed	Monocot	1	1	2	2	8	0.869	1.20	0.0300	0.265	3.08	3.08	10	0.3 - 30.8	0.9121	0	1.904	na	na
	Tetryl	Tetryl	Seed	Dicot	1	1	1	1	3	0.0767	0.0289	0.0600	0.0600	0.110	0.110	10	0.6 - 1.1	-0.3088	0	0.3500	na	na
	Tetryl	Tetryl	Seed	All	2	2	3	3	11	0.653	1.07	0.0300	0.110	2.40	3.08	10	0.3 - 30.8	0.5791	0	1.699	na	na
Figure 2.1-19	TNB	TNB	Foliage	Dicot	1	1	1	1	1	1.02		1.02	1.02	1.02	1.02	19.6	20	2.996	0			
	TNB	TNB	Foliage	All	1	1	1	1	1	1.02		1.02	1.02	1.02	1.02	19.6	20	2.996	0			
Figure 2.1-20	TNT	2ADNT	Foliage	Monocot	1	1	1	1	24	3.58	6.04	0.0119	1.69		29	0.27 - 99	0.64 - 18	0.9210	0.05530	0.9658	0.5766	0.01440
	TNT	2ADNT	Foliage	All	1	1	1	1	24	3.58	6.04	0.0119	1.69		29	0.27 - 99	0.64 - 18	0.9210	0.05530	0.9658	0.5760	0.01440
Figure 2.1-21	TNT	4ADNT	Foliage	Monocot	1	1	1	1	24	1.48	1.61	0.0119	1.08		5.74	0.27 - 99	0.64 - 3.3	0.3014	0.02094	0.5877	0.7277	0.005600
	TNT	4ADNT	Foliage	All	1	1	1	1	24	1.48	1.61	0.0119	1.08		5.74	0.27 - 99	0.64 - 3.3	0.3010	0.02090	0.5876	0.7277	0.005600
Figure 2.1-22	TNT	TNT	Foliage	Monocot	1	2	4	6	54	6.14	11.6	0.0000691	3.43		69	0.27 - 11000	0.64 - 435	1.954	0.03846	1.804	0.7738	0.001600
	TNT	TNT	Foliage	Dicot	1	1	2	2	7	3.77	3.91	0.200	4.14		10.9	10 - 13.8	2 - 109	14.41	-4.927	1.614	0.4044	0.1422
	TNT	TNT	Foliage	All	2	3	6	8	61	5.87	11	0.0000691	3.53		69	0.27 - 11000	0.64 - 435	2.019	0.05350	1.786	0.6841	0.002800
Figure 2.1-23	TNT	TNT	Fruit	Dicot	1	1	1	1	3	0.213	0.144	0.0500	0.270		0.320	10	0.5 - 3.2	0.4878	0	1.026	na	na
	TNT	TNT	Fruit	All	1	1	1	1	3	0.213	0.144	0.0500	0.270		0.320	10	0.5 - 3.2	--	--	--	na	na
Figure 2.1-24	TNT	TNT	Root	Monocot	1	1	2	3	12	10.6	22.1	0.0000978	1.32		77.5	1 - 39400	0 - 775	4.294	-0.3775	2.041	0.05410	0.3225
	TNT	TNT	Root	Dicot	3	3	3	3	5	10.4	15.8	0.0000240	1.71		37.1	1 - 6260	0.15 - 371	3.703	-0.4683	3.455	0.4380	0.2097
	TNT	TNT	Root	All	4	4	5	6	17	10.6	20	0.0000240	1.71		77.5	1 - 39400	0 - 775	4.018	-0.3732	2.317	0.04180	0.2480
Figure 2.1-25	TNT	TNT	Seed	Dicot	1	1	1	1	3	0.0467	0.0321	0.0100	0.0600		0.0700	10	0.1 - 0.7	-1.057	0	1.082	na	na
	TNT	TNT	Seed	All	1	1	1	1	3	0.0467	0.0321	0.0100	0.0600		0.0700	10	0.1 - 0.7	--	--	--	na	na

Notes:

Rows that are highlighted indicate ln-ln linear relationship are statistically significant (α=0.05)

Table 3.2-1. Summary Statistics of Uptake Values and Regression Models for Soil Invertebrates

Figure No.	Parent Analyte	Compound in Plant Tissue	Tissue	BAF Summary Statistics: n	mean	std	min	median	max	Range of Detected Concentrations: Soil	Plant Tissue	Intercept	Slope	Root Mean Square Error	p	r2
Figure 3.2-1	2,4-DANT	2,4-DANT	Whole-body	2	3.71	1.98	2.31	3.71	5.10	2.17 - 32.4	5.02 - 165	0.608	1.294	0	.	.
Figure 3.2-2	2,6-DANT	2,6-DANT	Whole-body	1	3.16		3.16	3.16	3.16	44.5	140	4.945	0.000	0	.	.
Figure 3.2-3	2ADNT	2ADNT	Whole-body	21	5.37	6.01	0.0117	4.33	29.6	0.387 - 109	0.14 - 591	1.593	0.766	1.78	0.0125	0.286
Figure 3.2-4	4ADNT	4ADNT	Whole-body	22	4.15	2.61	0.0125	3.78	9.13	0.731 - 91	0.15 - 414	1.701	0.696	1.73	0.0473	0.1826
Figure 3.2-5	HMX	HMX	Whole-body	3	0.469	0.473	0.0925	0.313	1.00	9 - 400	9 - 37	1.427	0.380	0.189	0.1165	0.9337
Figure 3.2-6	Perchlorate	Perchlorate	Whole-body	4	2.26	4.13	0.0196	0.281	8.46	3.82 - 591	11.4 - 32.3	3.474	-0.198	0.363	0.0148	0.655
Figure 3.2-7	RDX	RDX	Whole-body	4	4.32	4.79	0.675	2.63	11.4	11 - 400	125 - 283	4.376	0.230	0.202	0.0067	0.812
Figure 3.2-8	TNT	2,4-DANT	Whole-body	2	1.99	2.39	0.307	1.99	3.68	1.36 - 2.73	0.836 - 5.02	2.413	-2.585	0	.	.
Figure 3.2-9	TNT	2ADNT	Whole-body	9	3.74	6.09	0.320	0.493	14.5	1.36 - 135	1.44 - 157	1.562	0.521	1.35	0.1037	0.333
Figure 3.2-10	TNT	4ADNT	Whole-body	9	10.1	19	0.560	0.678	50.6	1.36 - 135	2.52 - 113	2.718	0.259	1.39	0.3948	0.1051
Figure 3.2-11	TNT	TNT	Whole-body	6	0.0649	0.0661	0.000333	0.0581	0.170	60 - 367	0.02 - 19.7	-9.591	2.119	2.71	0.3416	0.2252

Notes:

Rows that are highlighted indicate log-log linear relationshp are statistically significant (α=0.05)

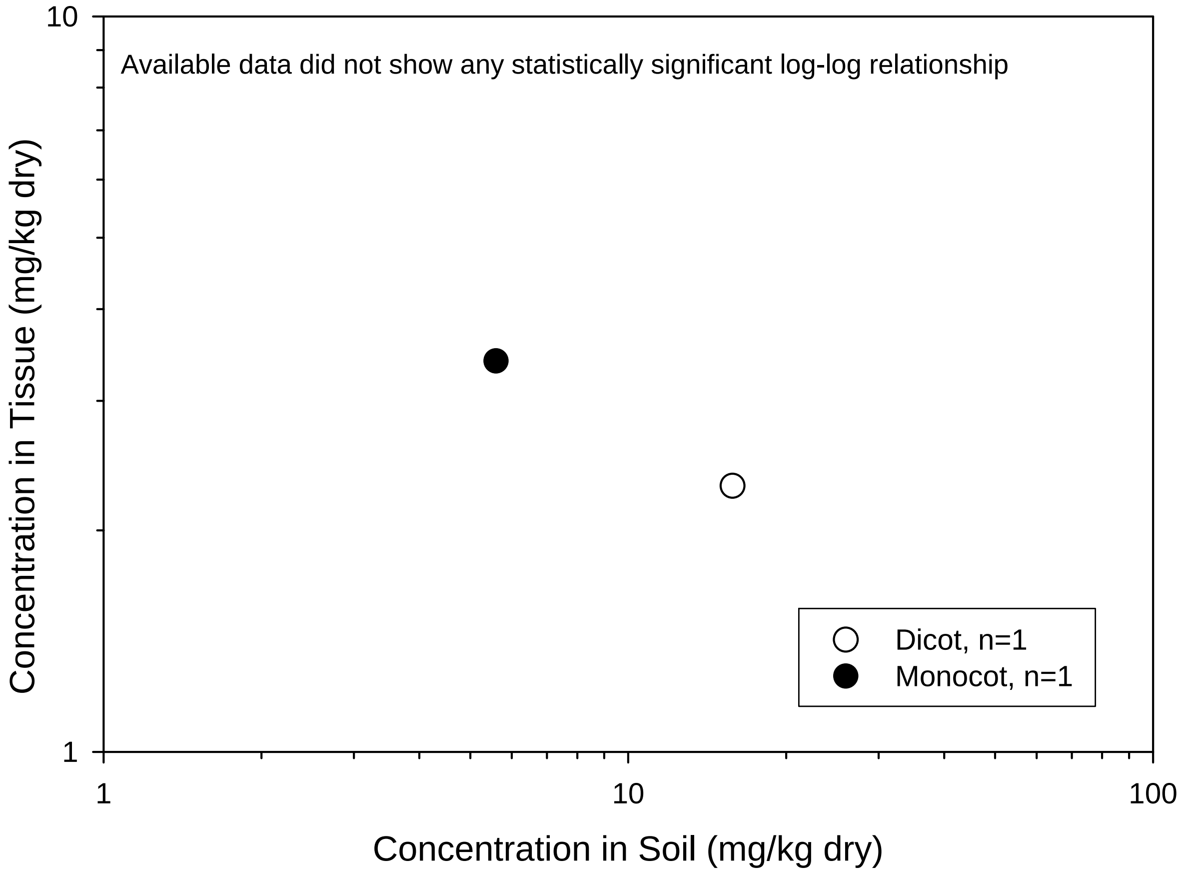

Figure 3.1-1. 2,4-DNT in Soil to 2,4-DNT in Plant Foliage

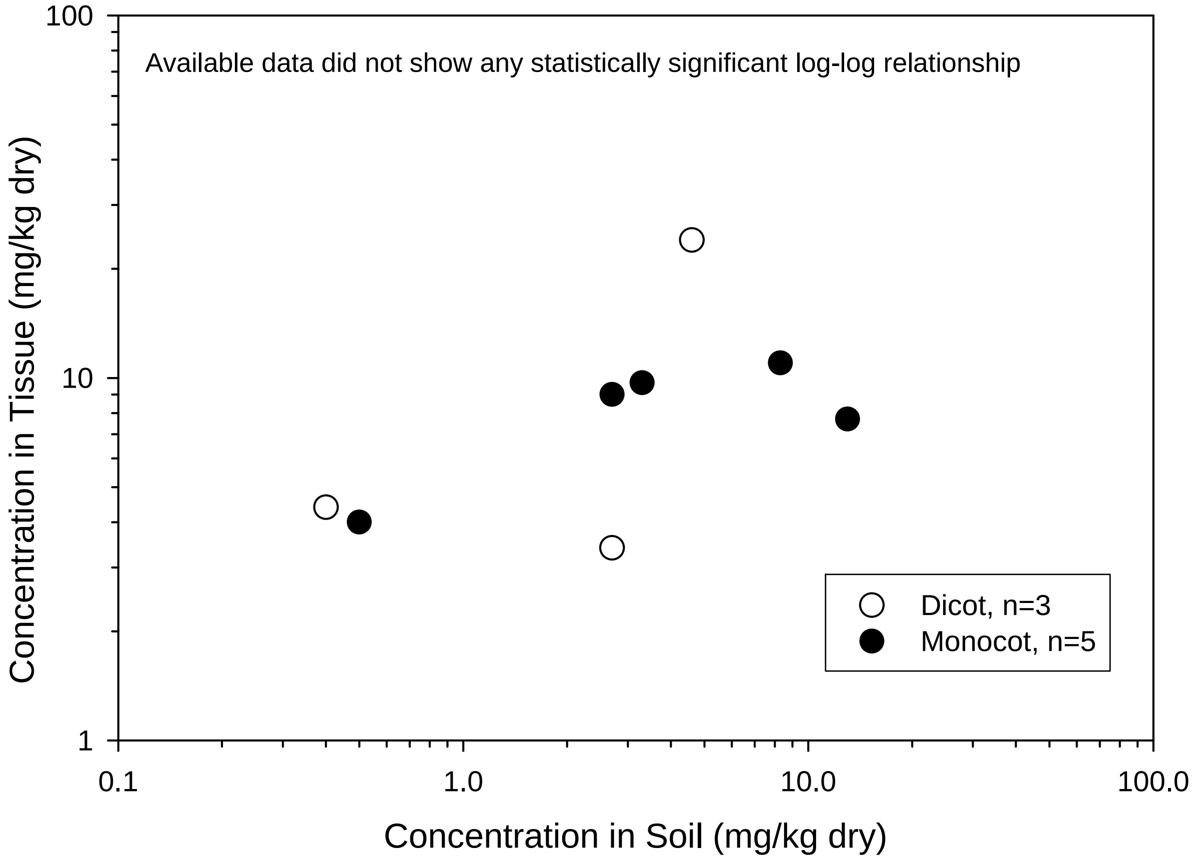

Figure 3.1-2. 2,6-DNT in Soil to 2,6-DNT in Plant Foliage

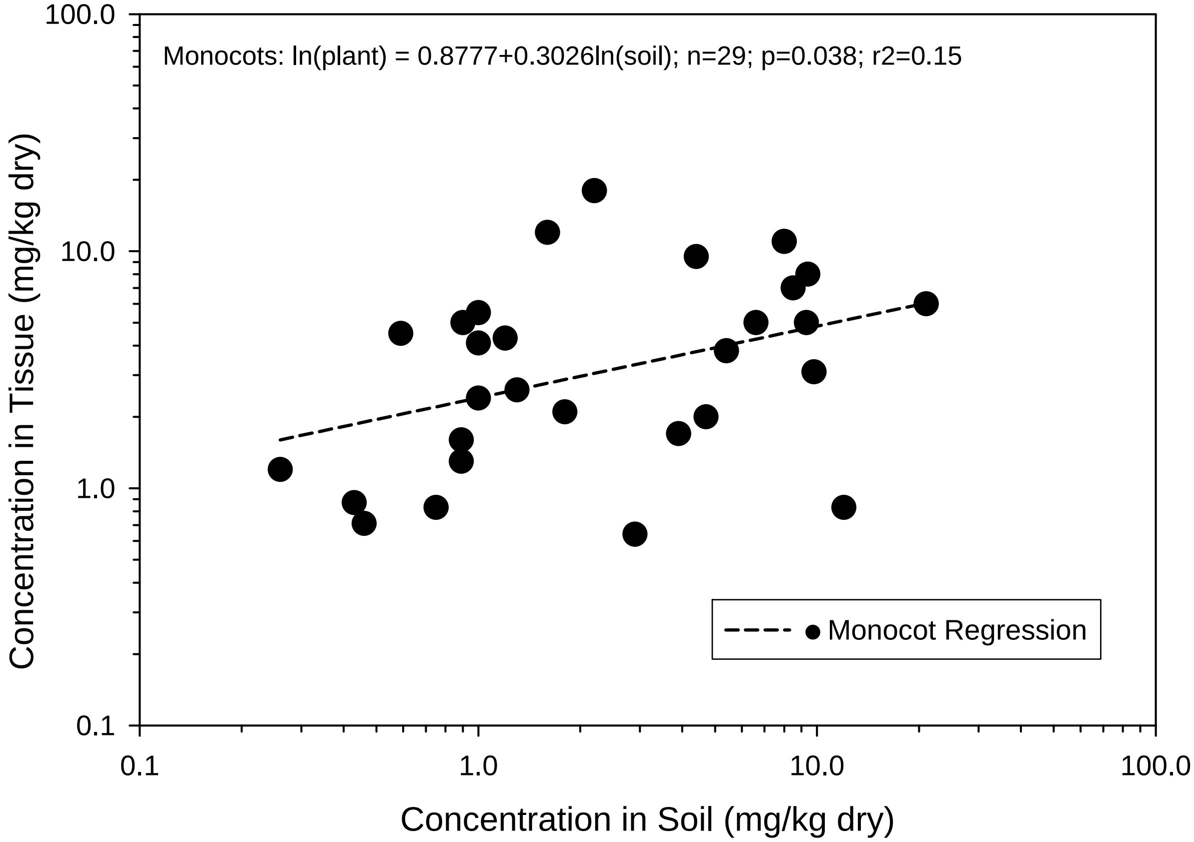

Figure 3.1-3. 2-ADNT in Soil to 2-ADNT in Plant Foliage

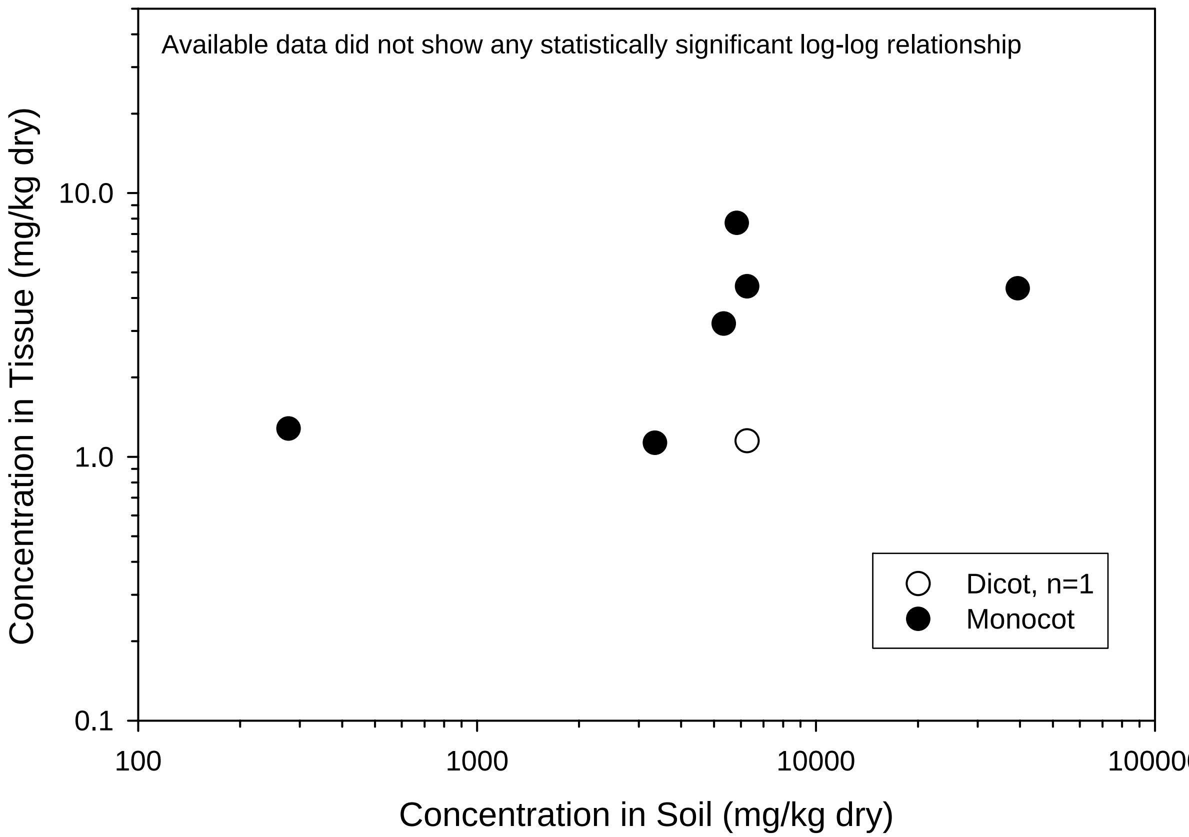

Figure 3.1-4. 2-ADNT in Soil to 2-ADNT in Plant Root

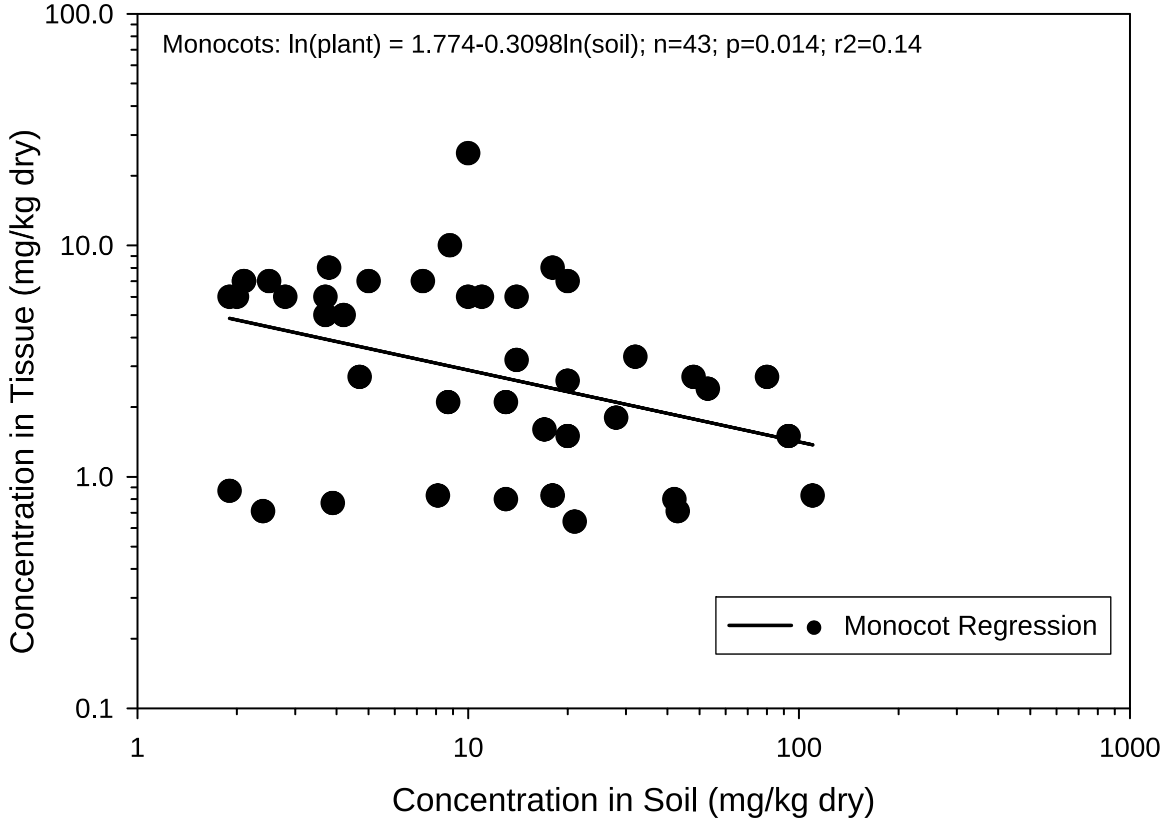

Figure 3.1-5. 4-ADNT in Soil to 4-ADNT in Plant Foliage

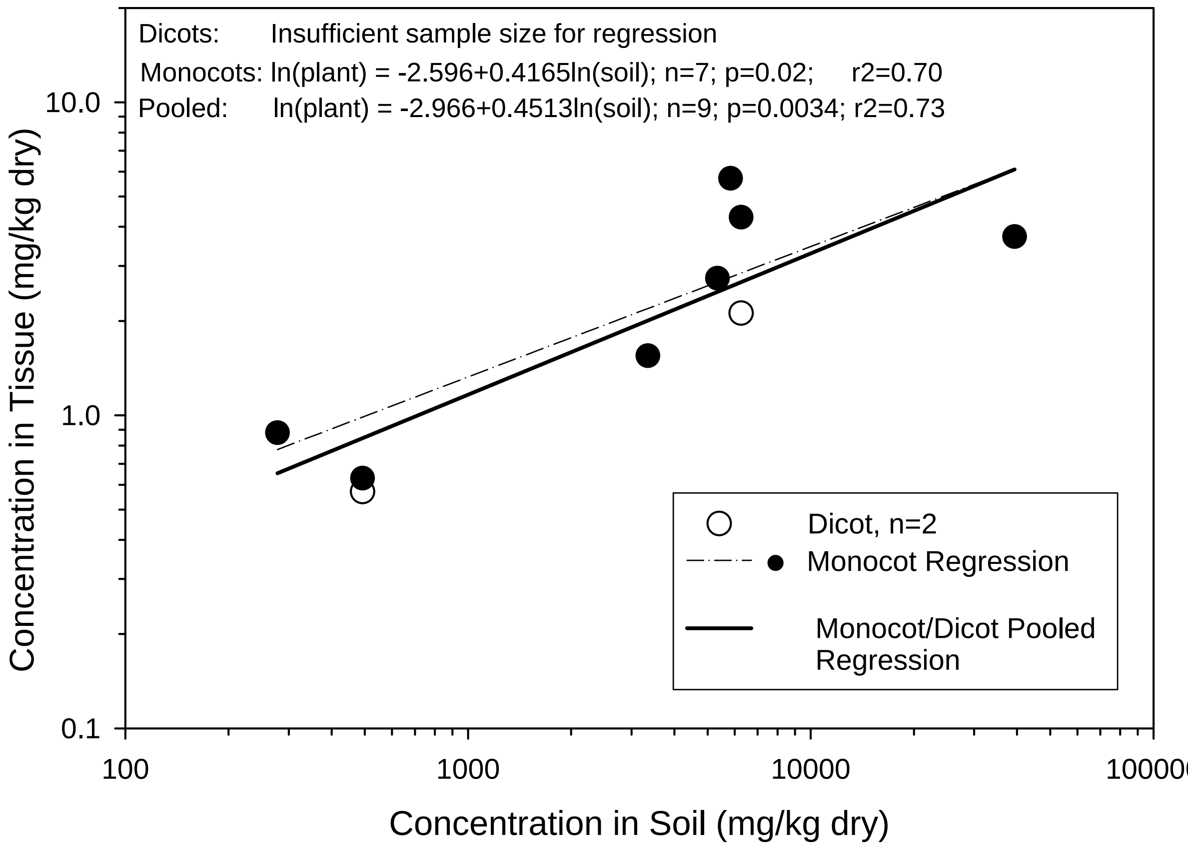

Figure 3.1-6. 4-ADNT in Soil to 4-ADNT in Plant Root

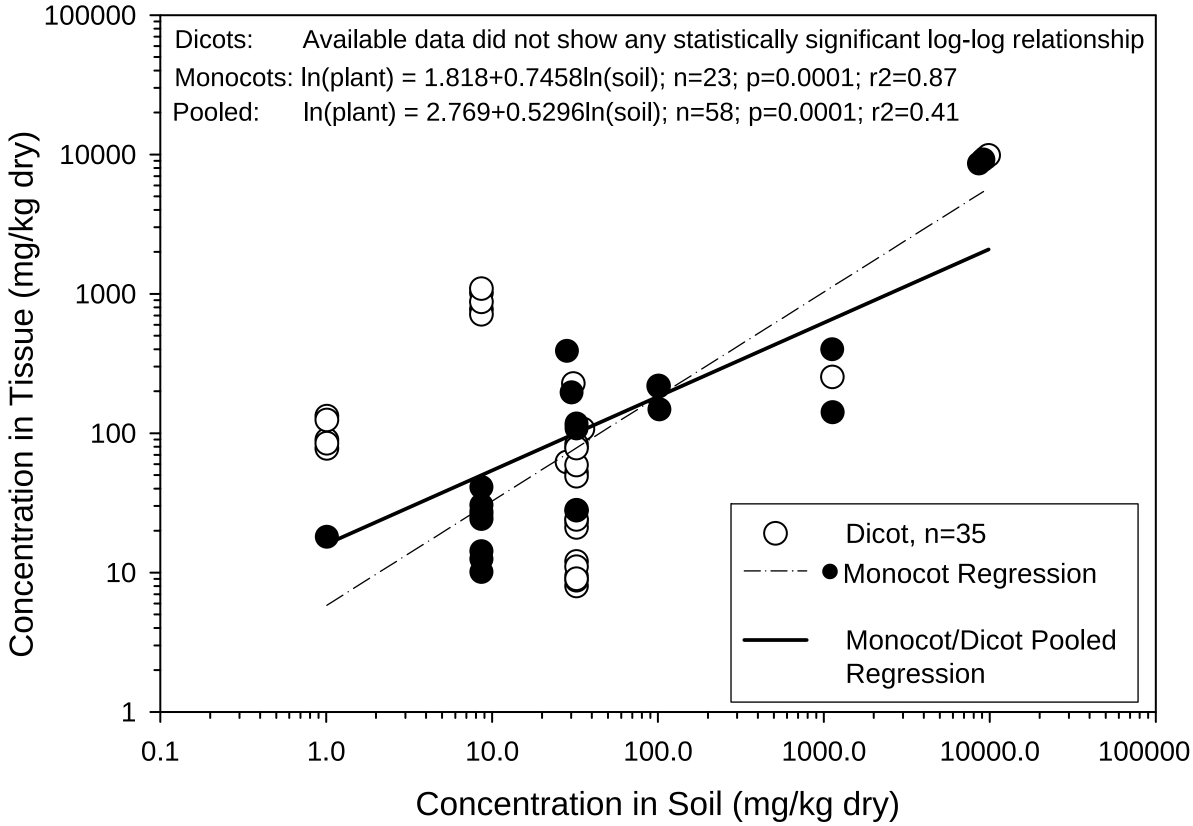

Figure 3.1-7. HMX in Soil to HMX in Plant Foliage

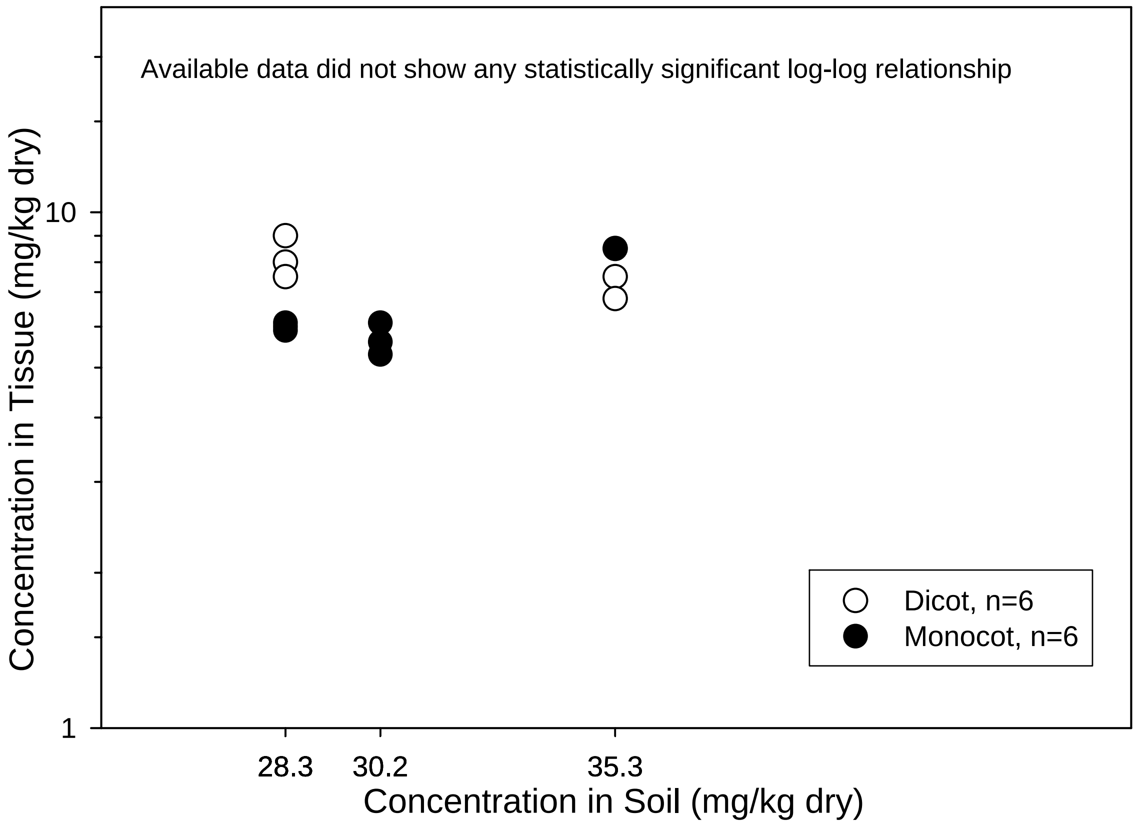

Figure 3.1-8. HMX in Soil to HMX in Plant Root

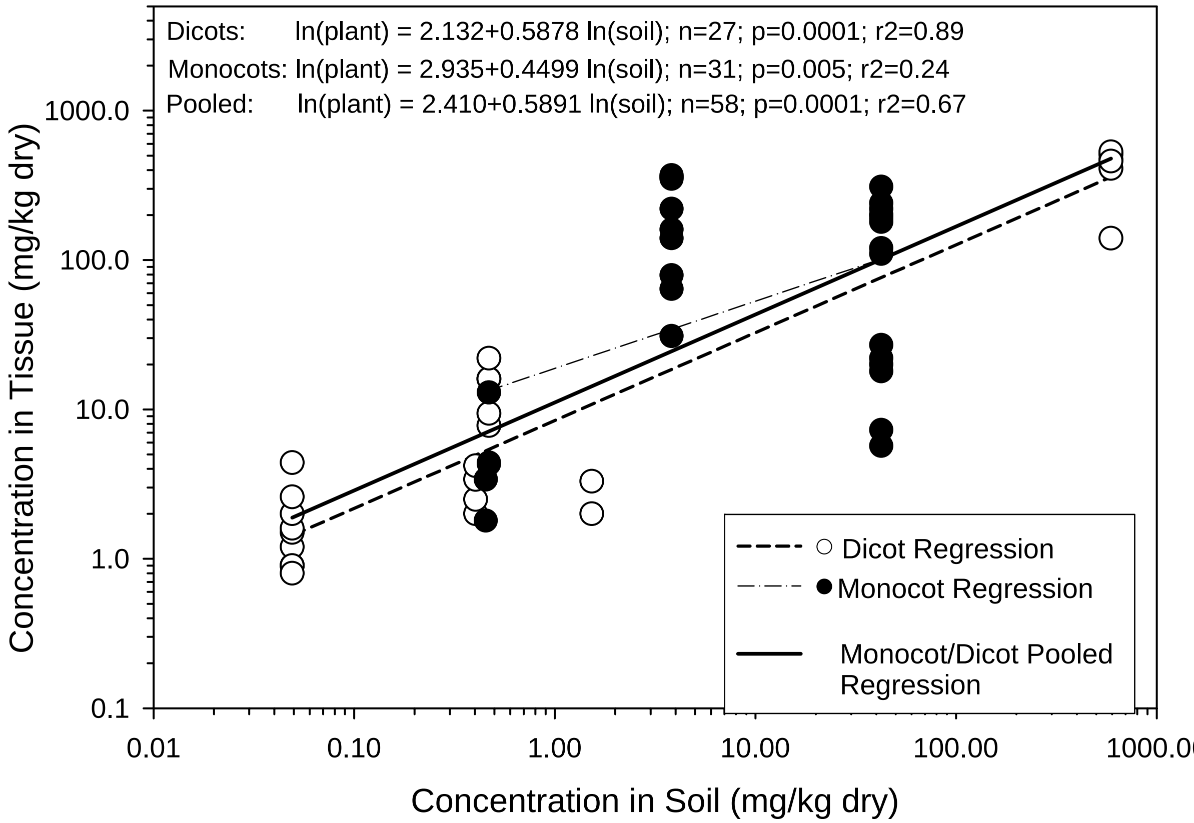

Figure 3.1-9. Perchlorate in Soil to Perchlorate in Plant Foliage

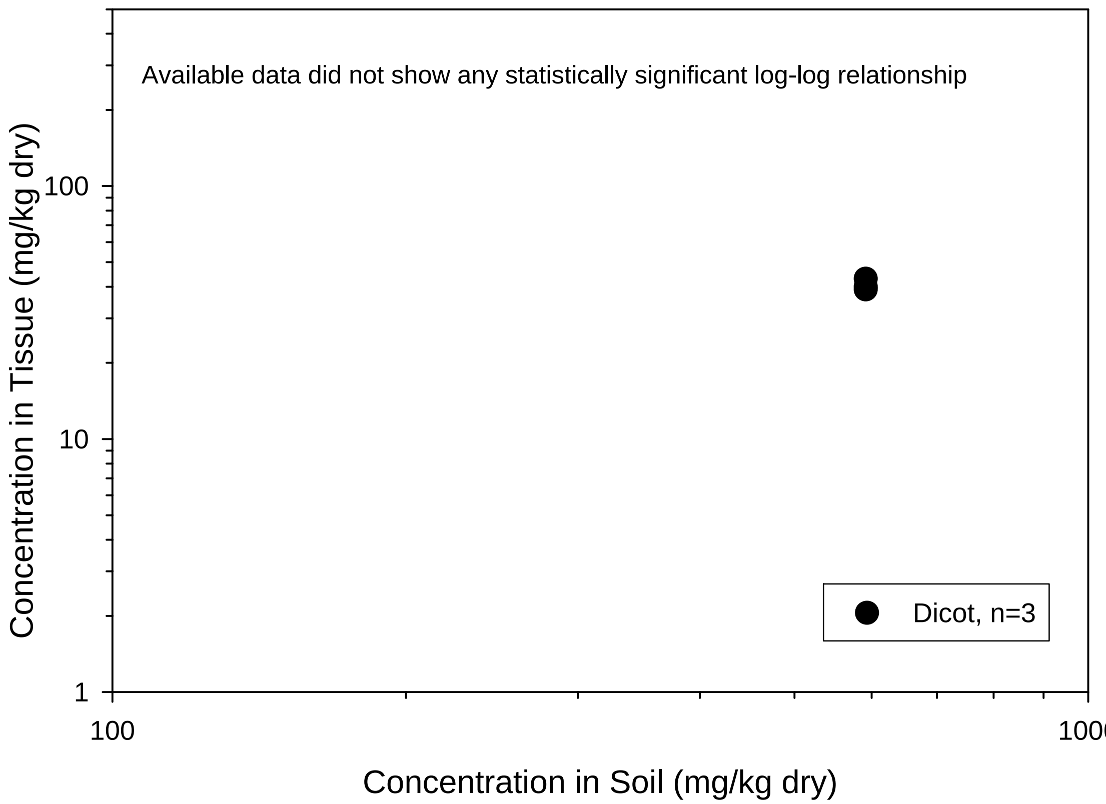

Figure 3.1-10. Perchlorate in soil to Perchlorate in Plant Seed

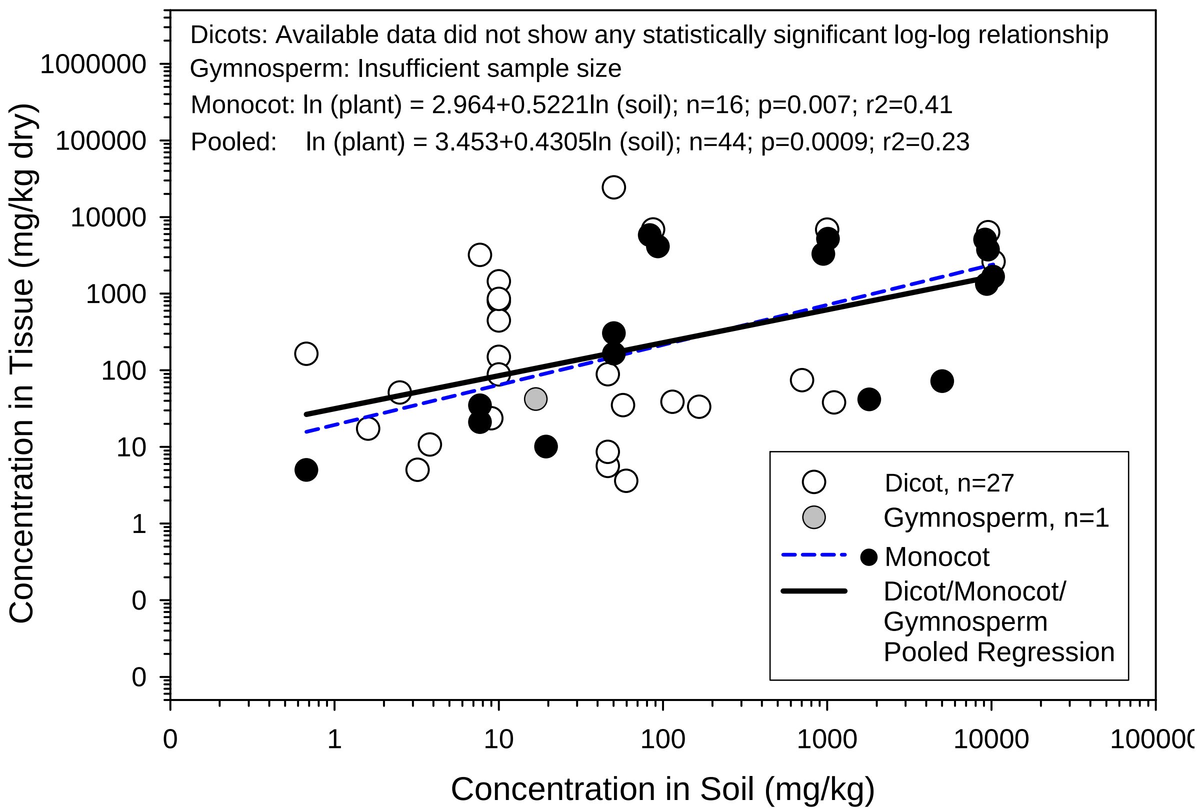

Figure 3.1-11. RDX in Soil to RDX in Plant Foliage

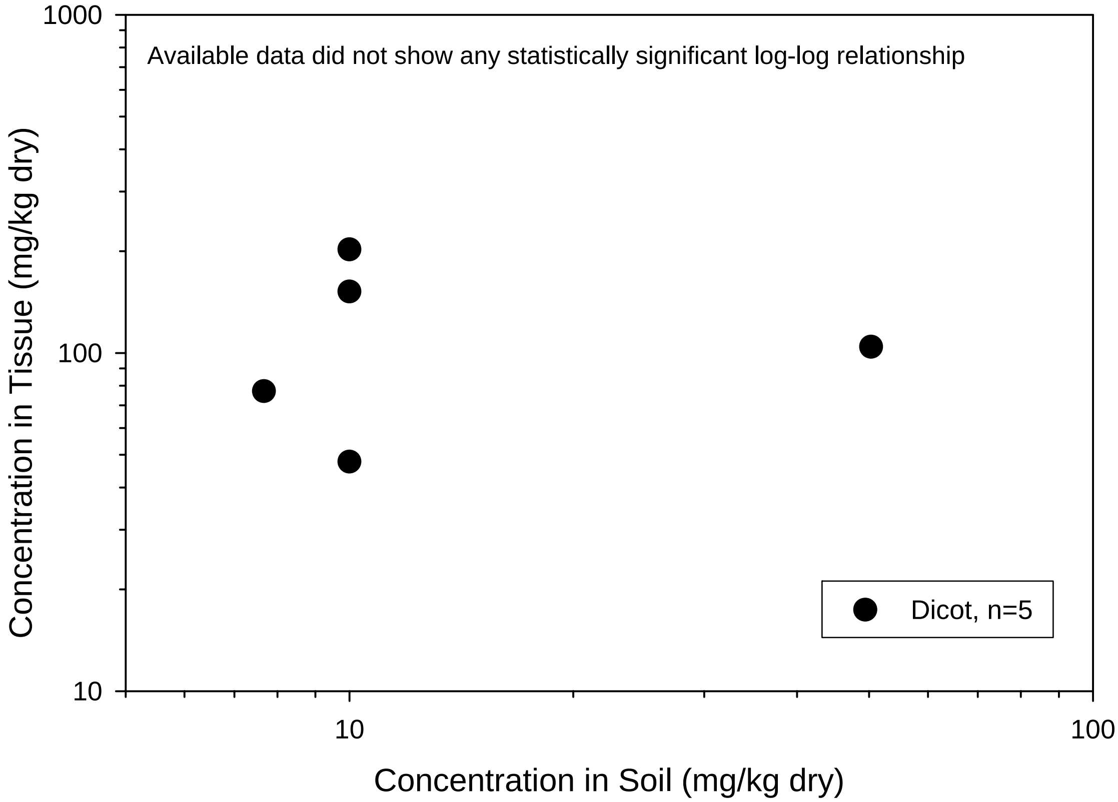

Figure 3.1-12. RDX in Soil to RDX in Fruit

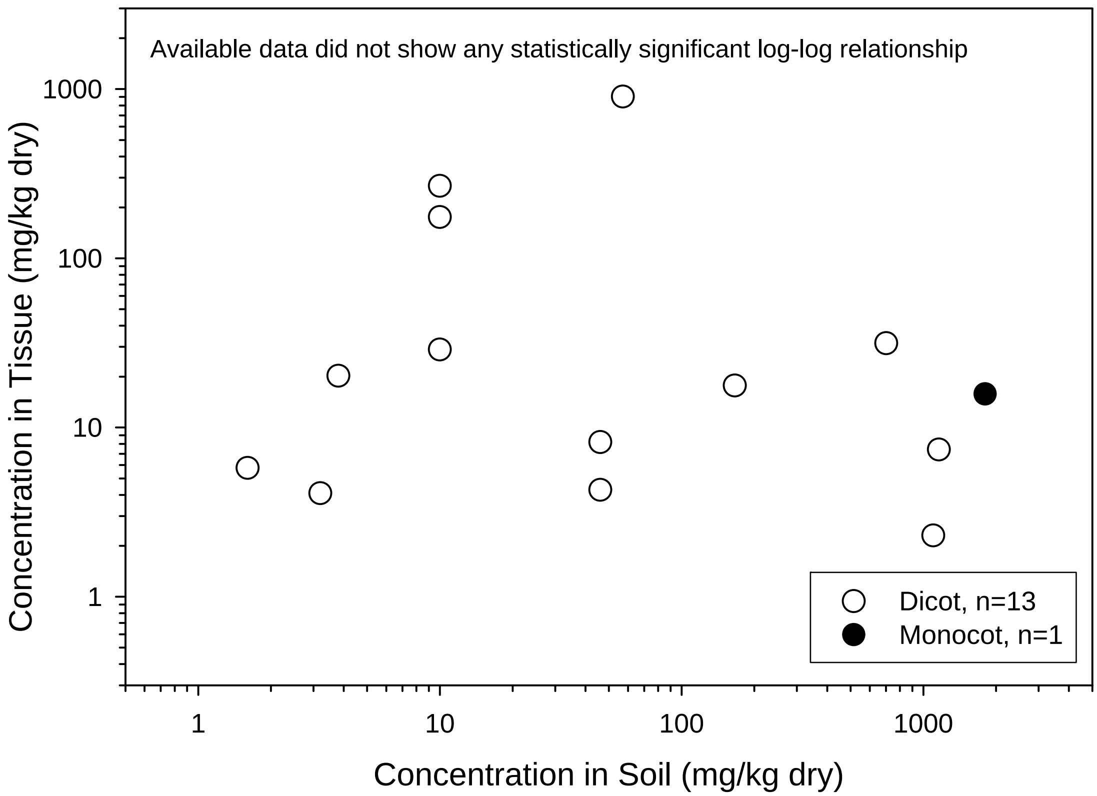

Figure 3.1-13. RDX in Soil to RDX in Plant Root

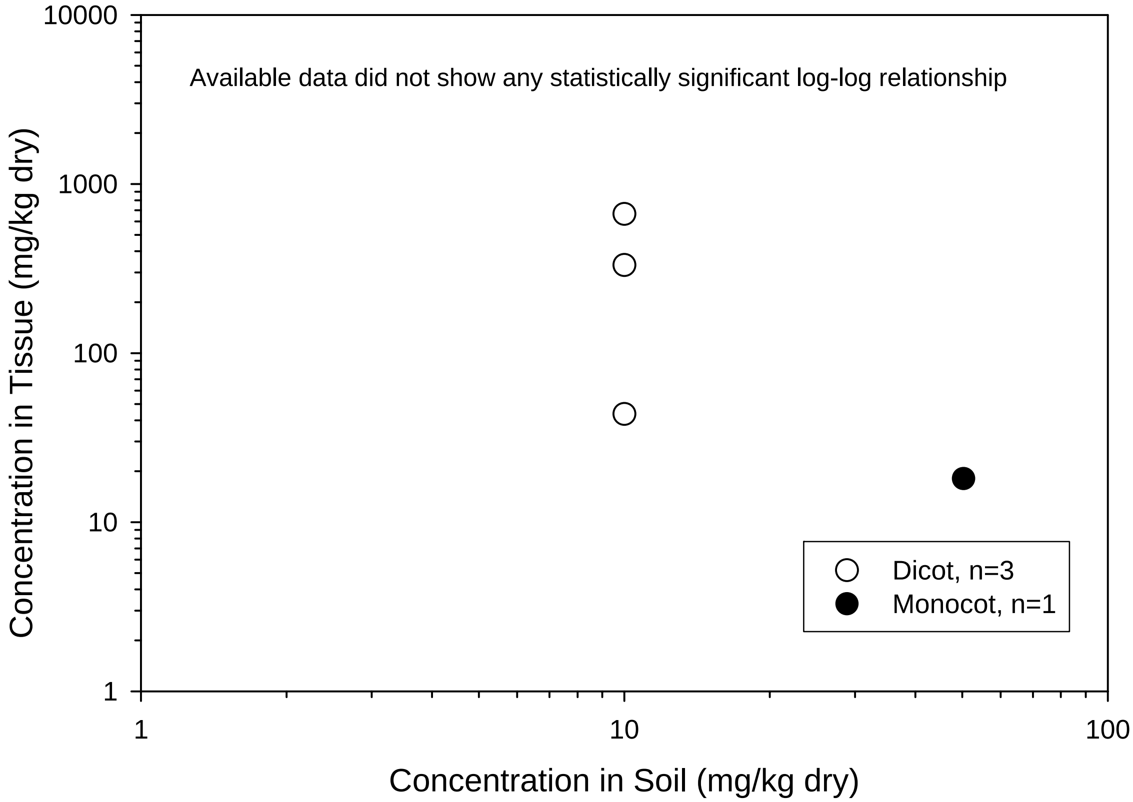

Figure 3.1-14. RDX in Soil to RDX in Plant Seed

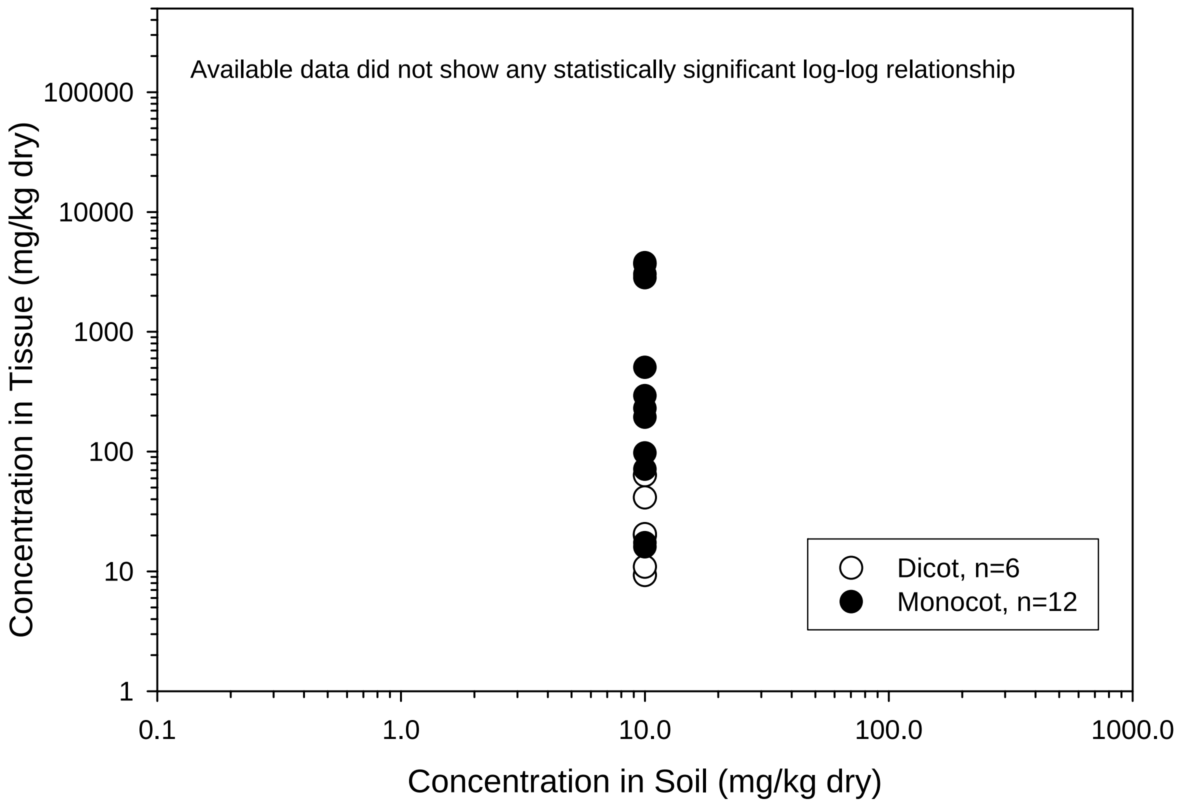

Figure 3.1-15. Tetryl in Soil to Tetryl in Plant Foliage

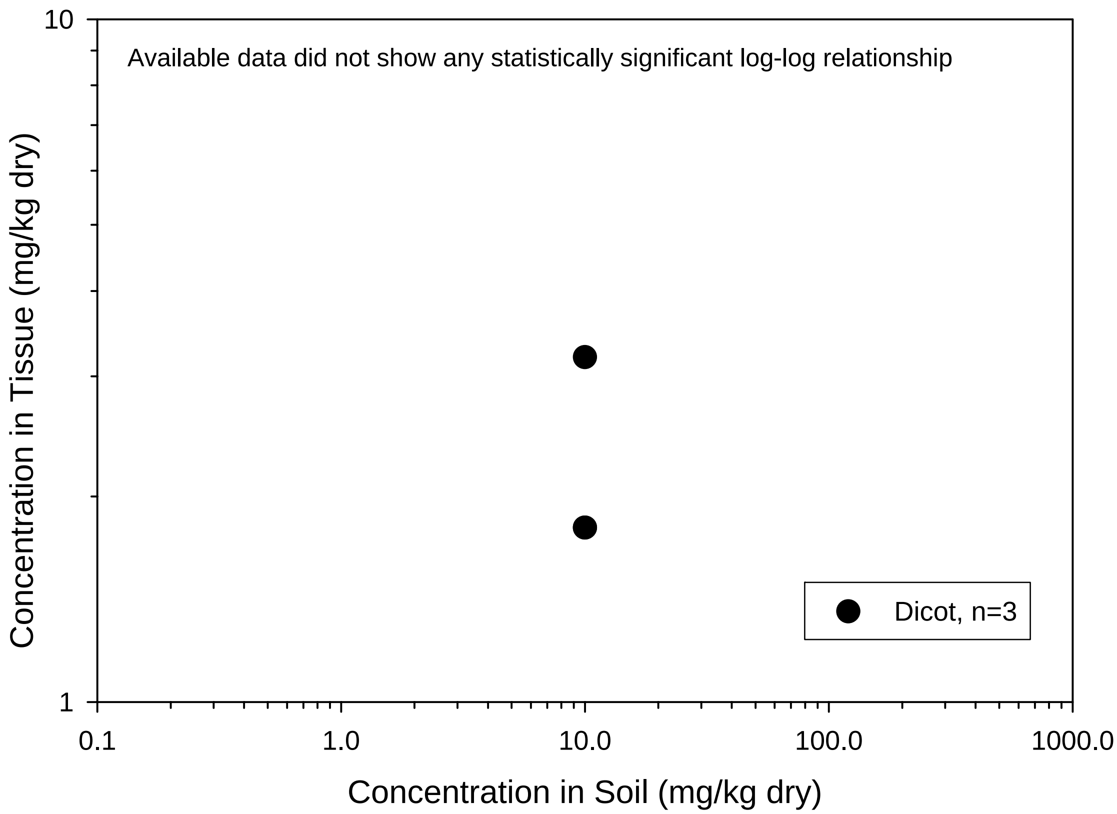

Figure 3.1-16. Tetryl in Soil to Tetryl in Fruits

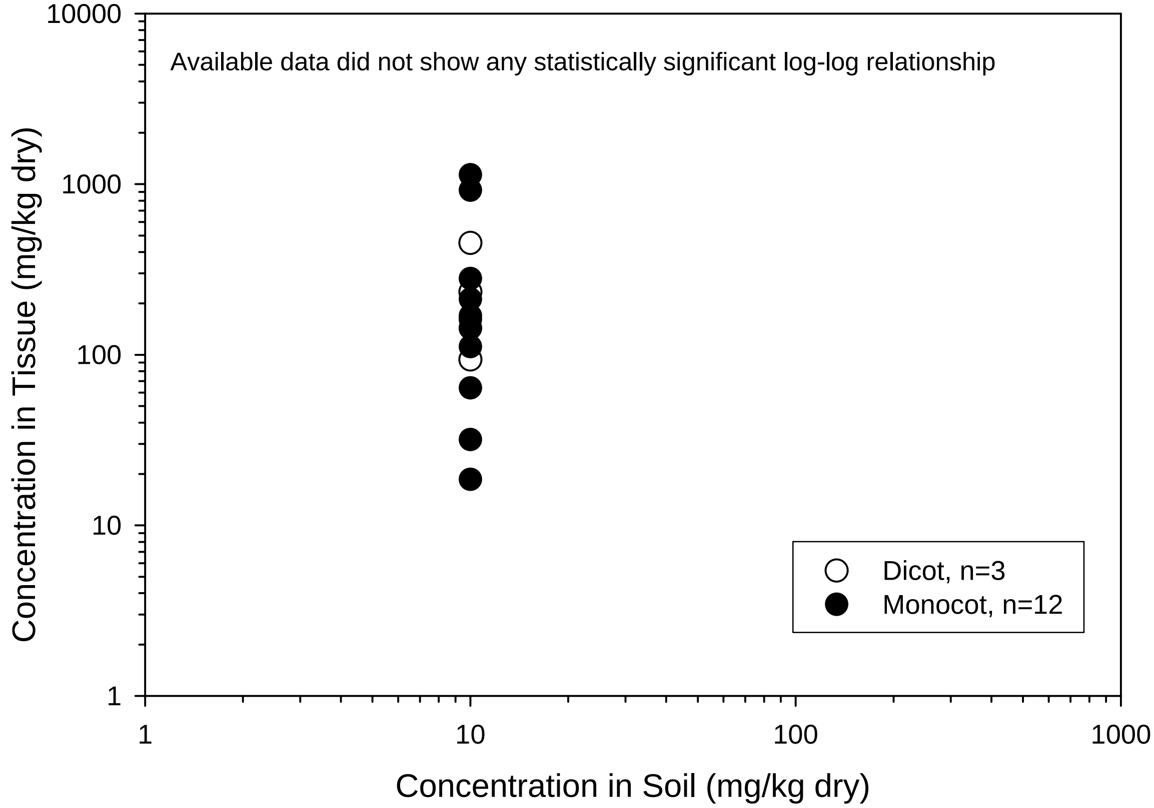

Figure 2.1-17. Tetryl in Soil to Tetryl in Plant Root

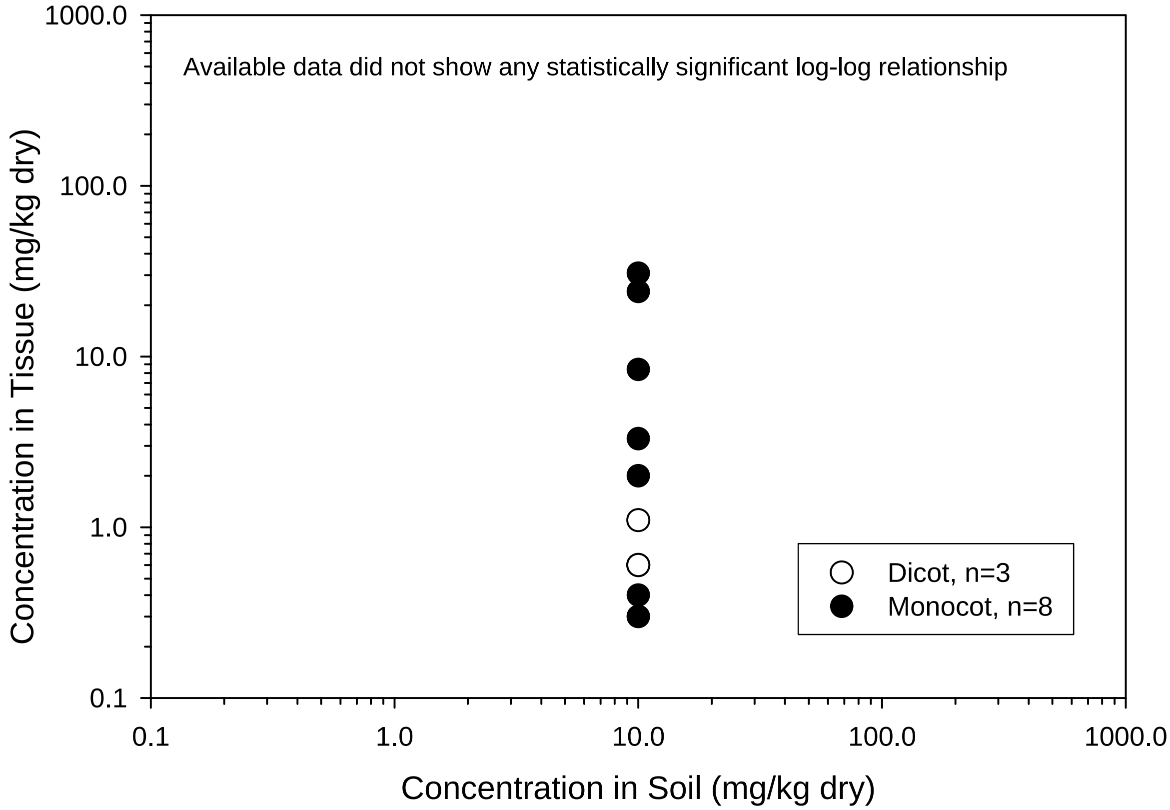

Figure 3.1-18. Tetryl in Soil to Tetryl in Plant Seed

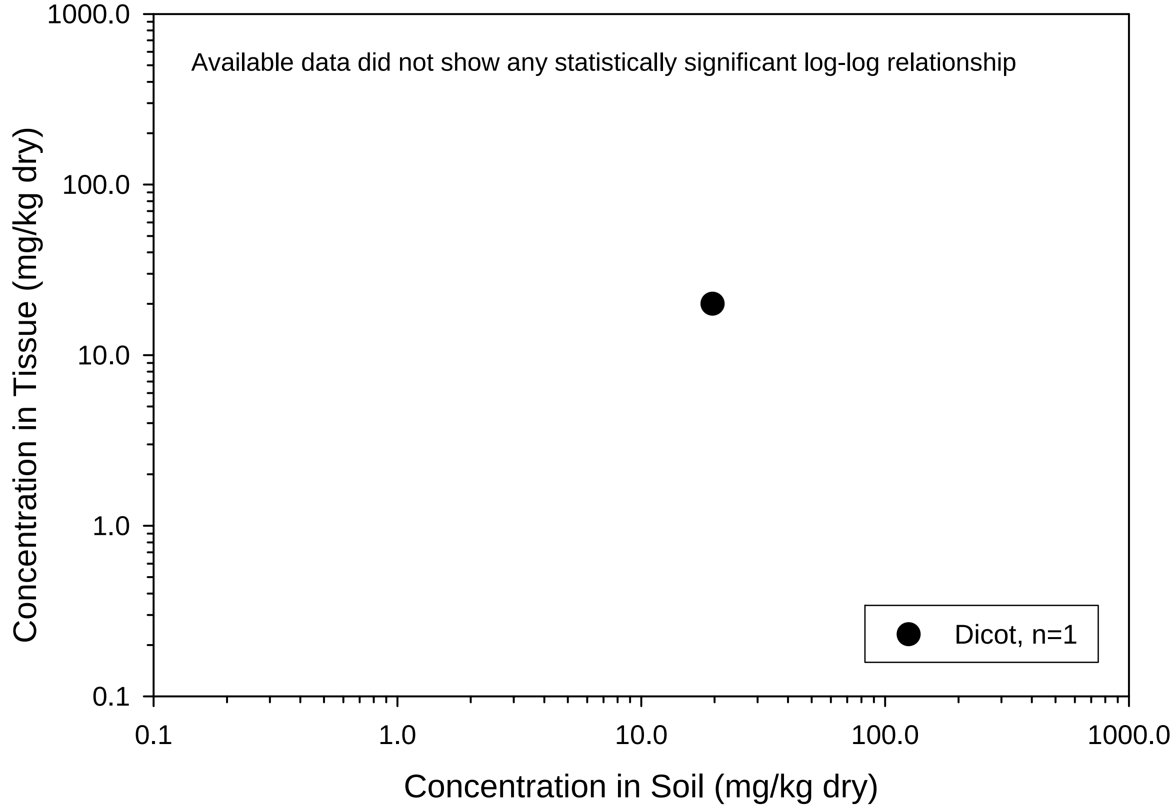

Figure 3.1-19. TNB in Soil to TNB in Plant Foliage

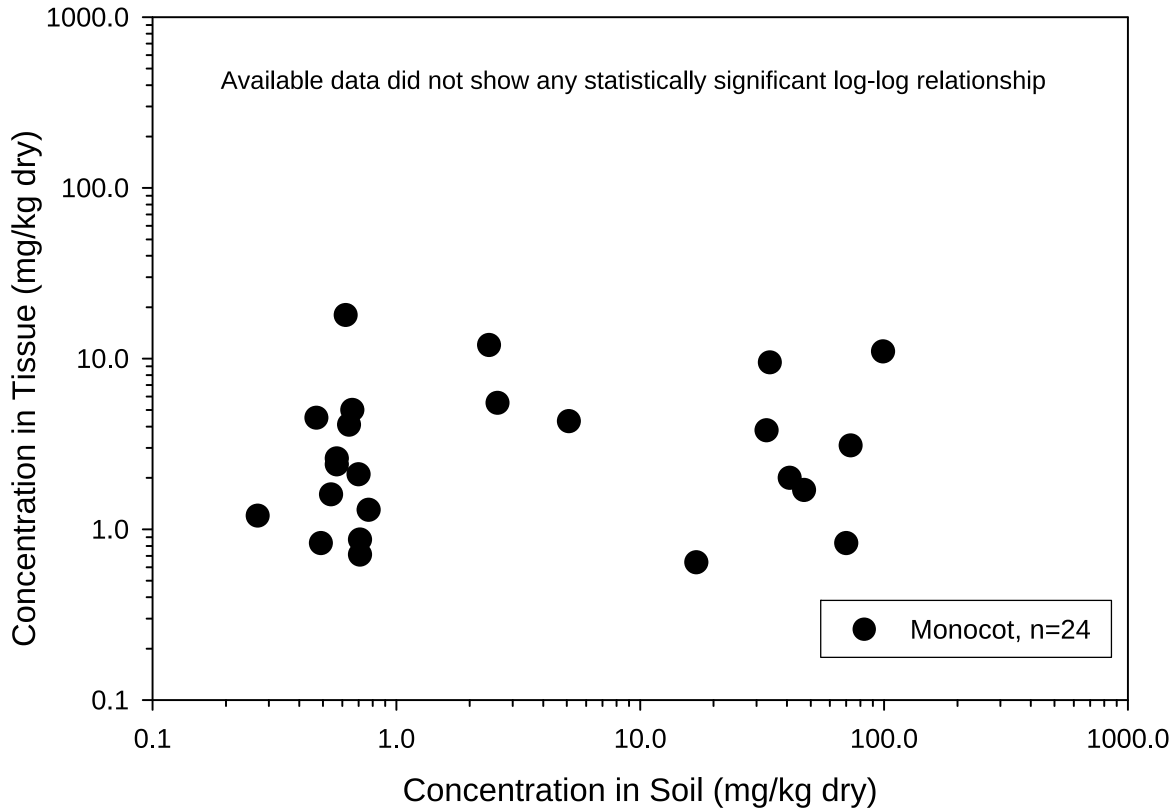

Figure 3.1-20. TNT in Soil to 2-ADNT in Plant Foliage

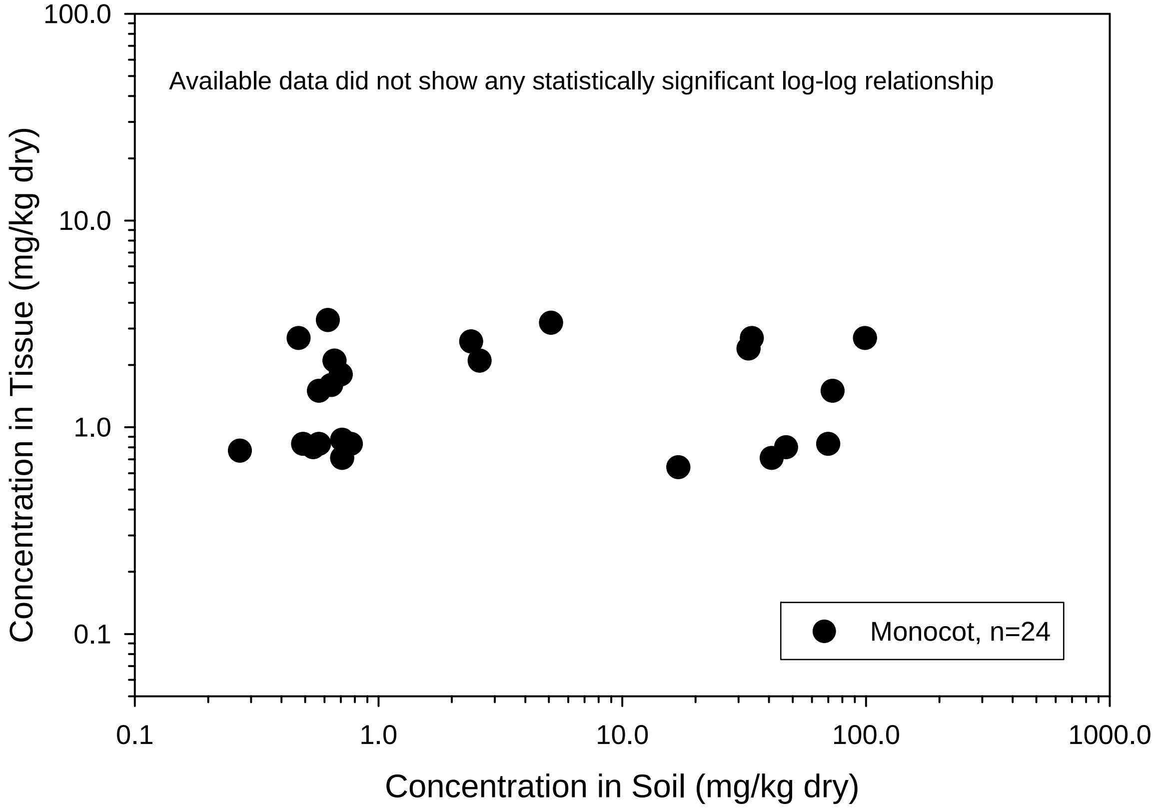

Figure 3.1-21. TNT in Soil to 4-ADNT in Plant Foliage

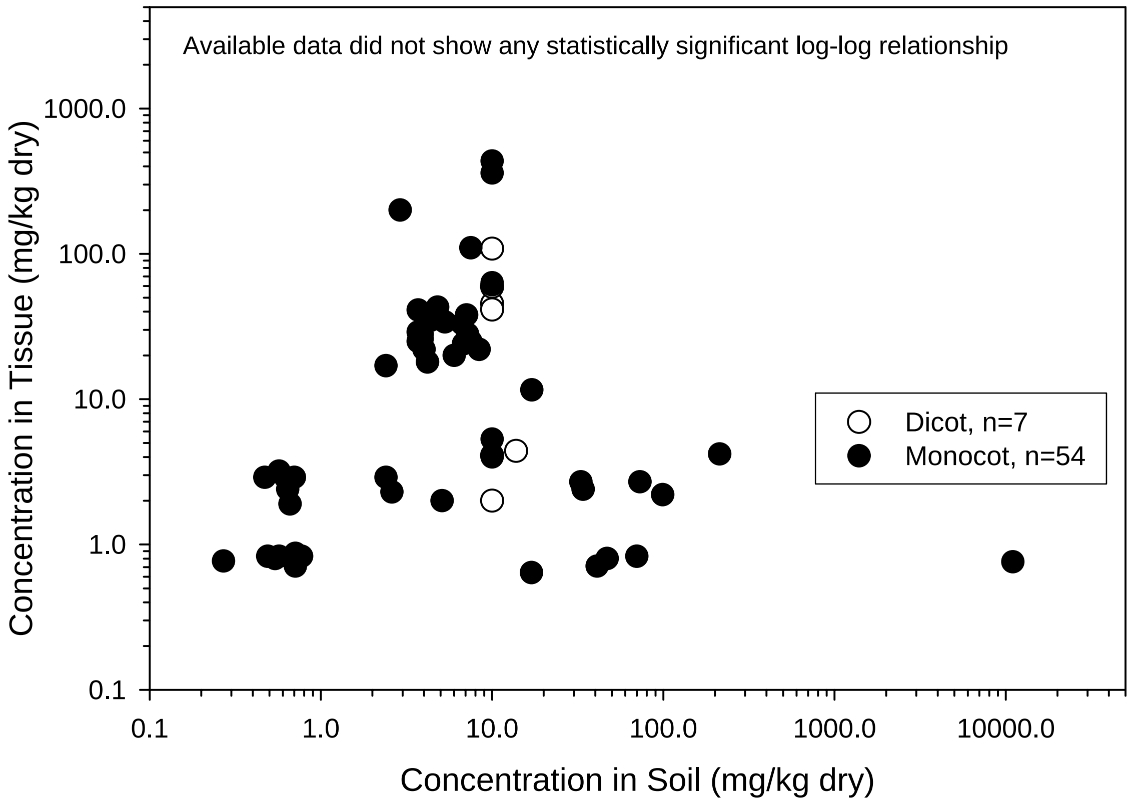

Figure 3.1-22. TNT in Soil to TNT in Plant Foliage

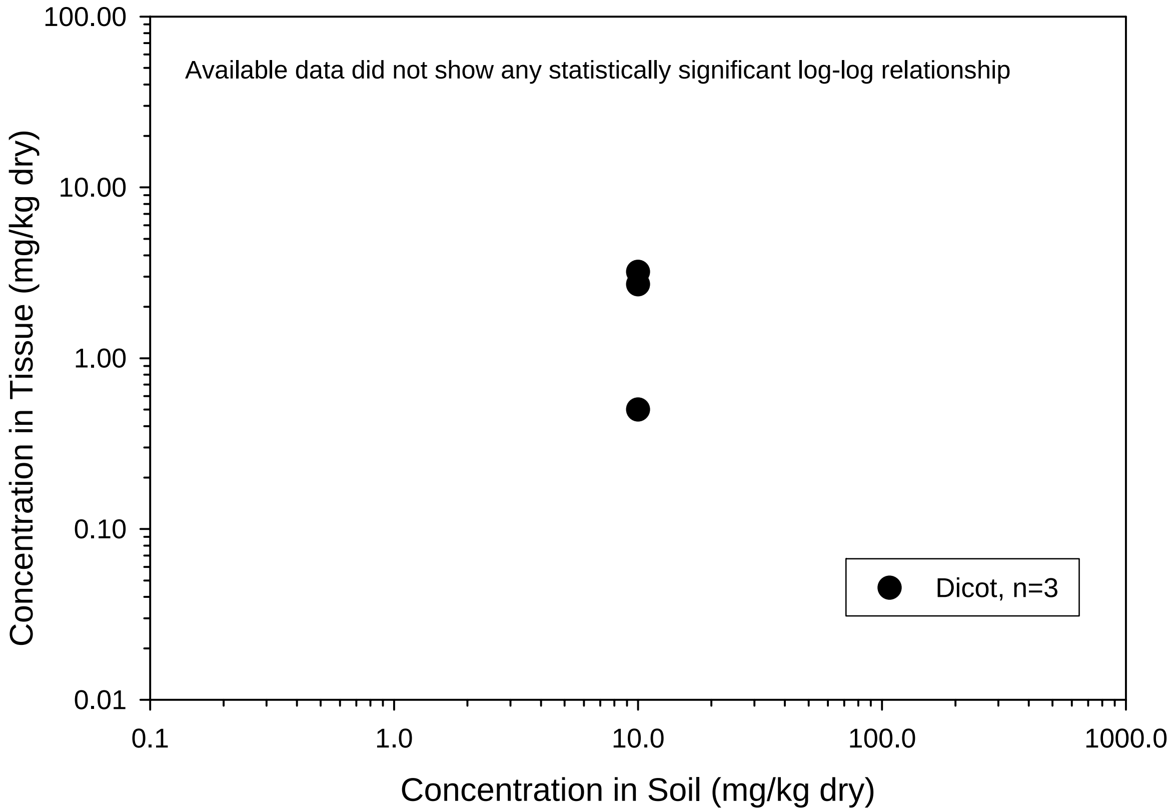

Figure 3.1-23. TNT in Soil to TNT in Fruit

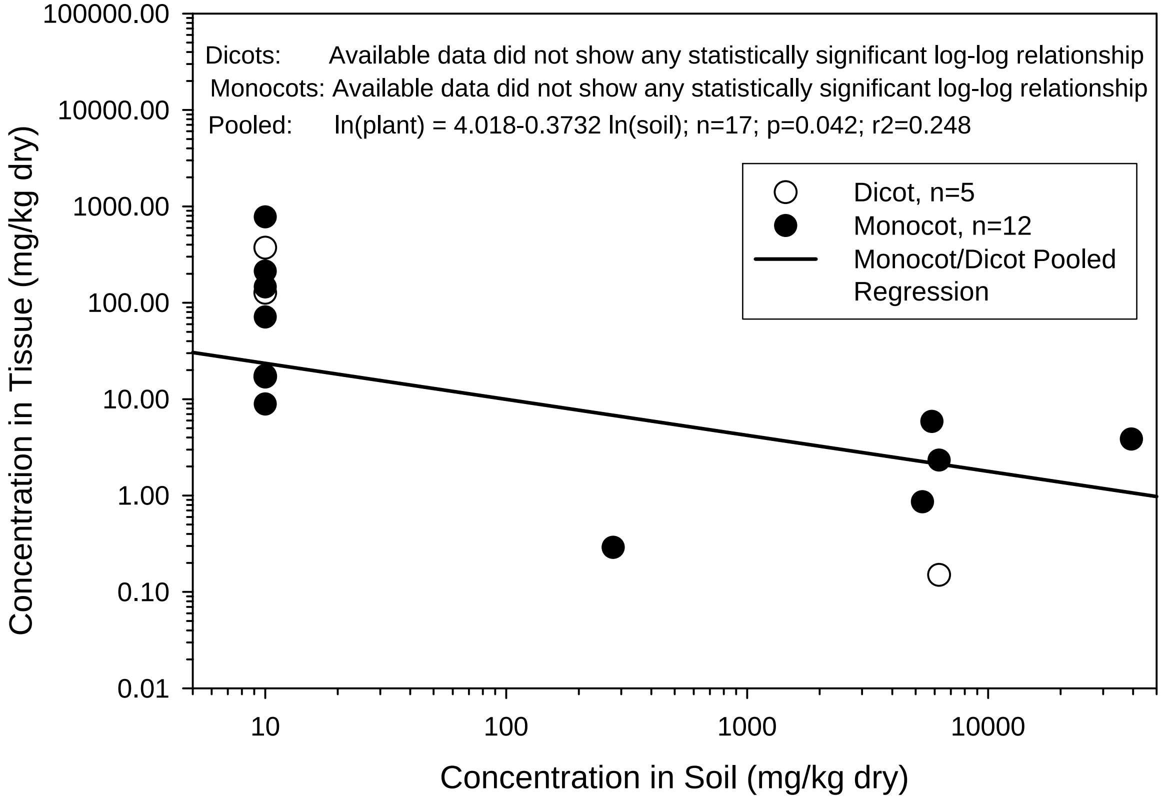

Figure 3.1-24. TNT in Soil to TNT in Plant Root

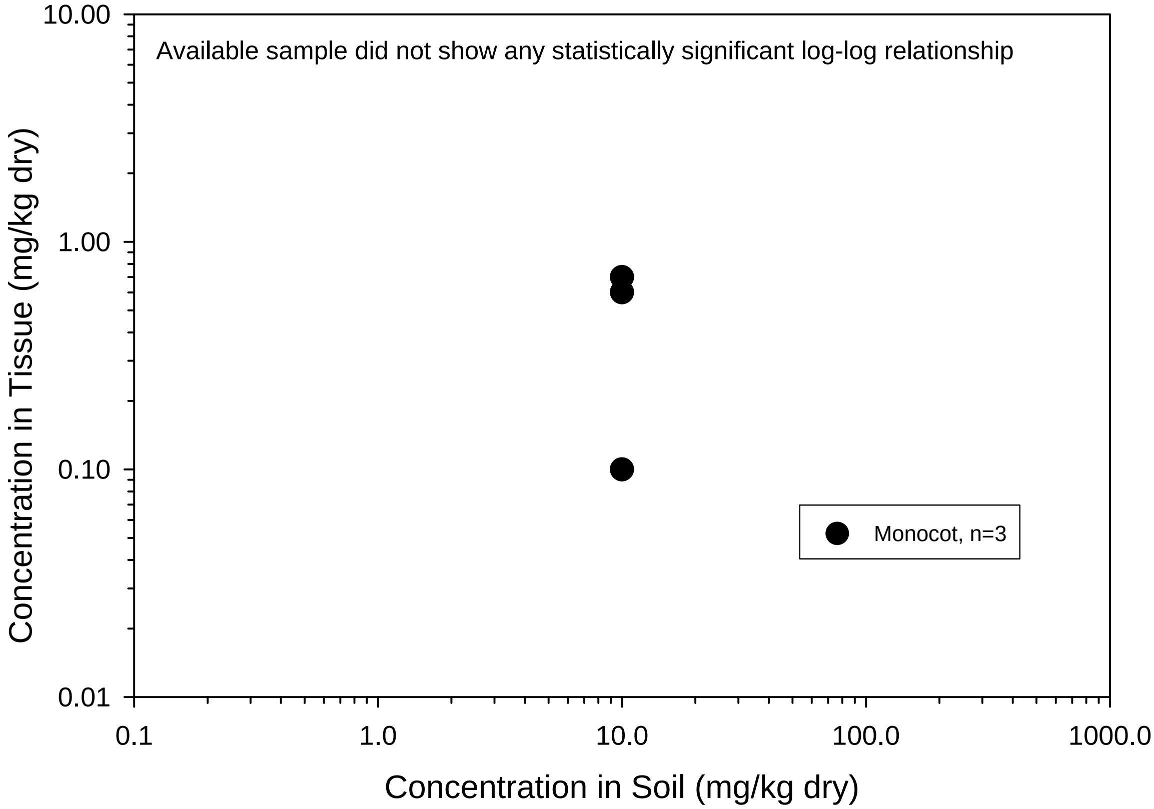

Figure 3.1-25. TNT+2-ADNT in soil to 2-ADNT in Plant Foliage

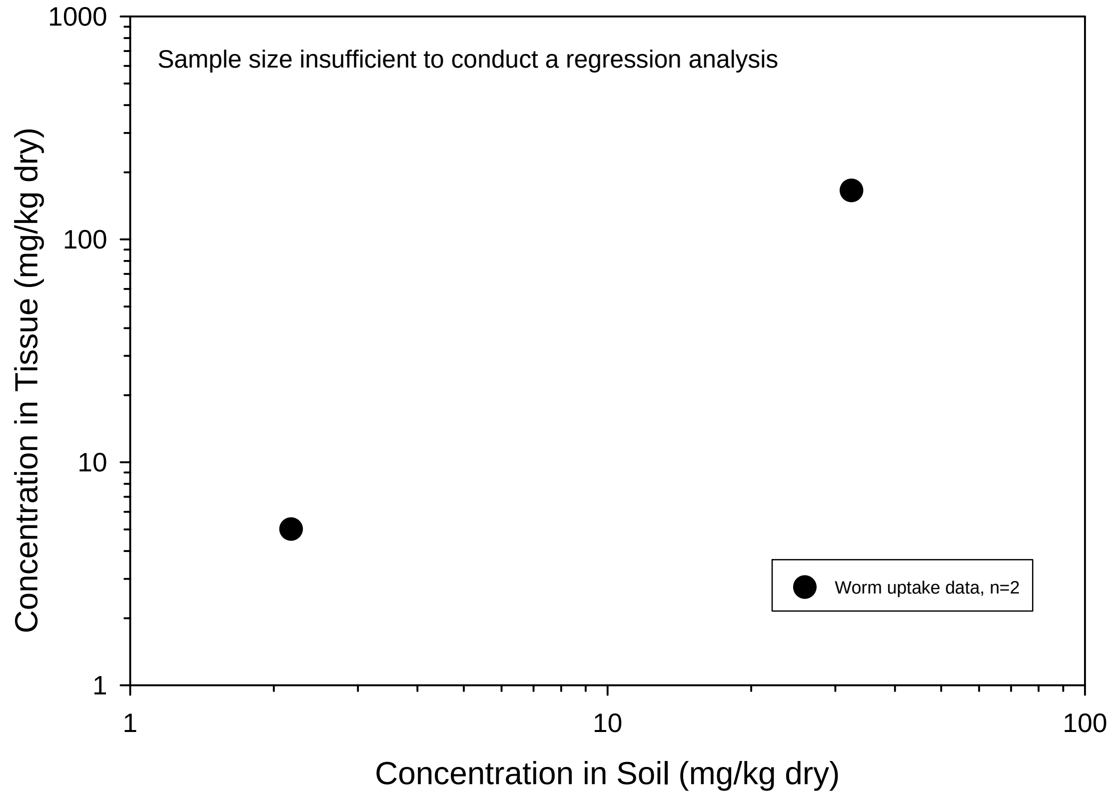

Figure 3.2-1. 2,4-DANT in Soil to 2,4-DANT in Earthworm (whole-body)

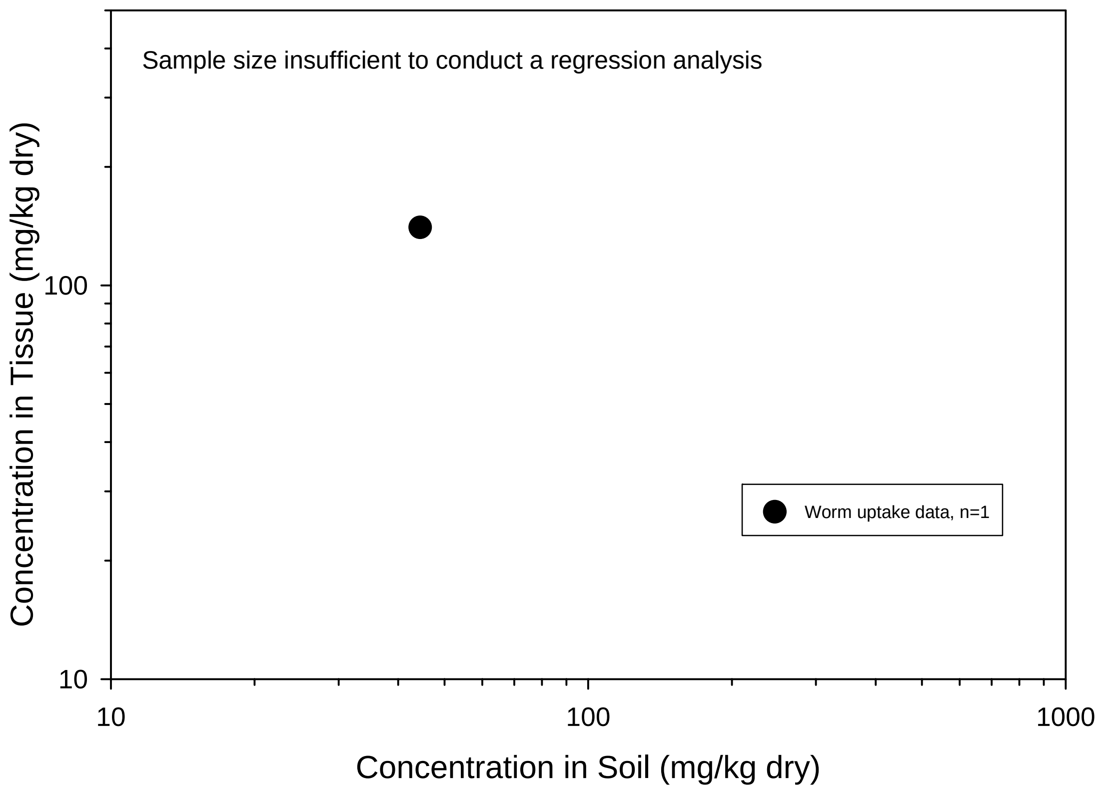

Figure 3.2-2. 2,6-DANT in Soil to 2,6-DANT in Earthworm (whole-body)

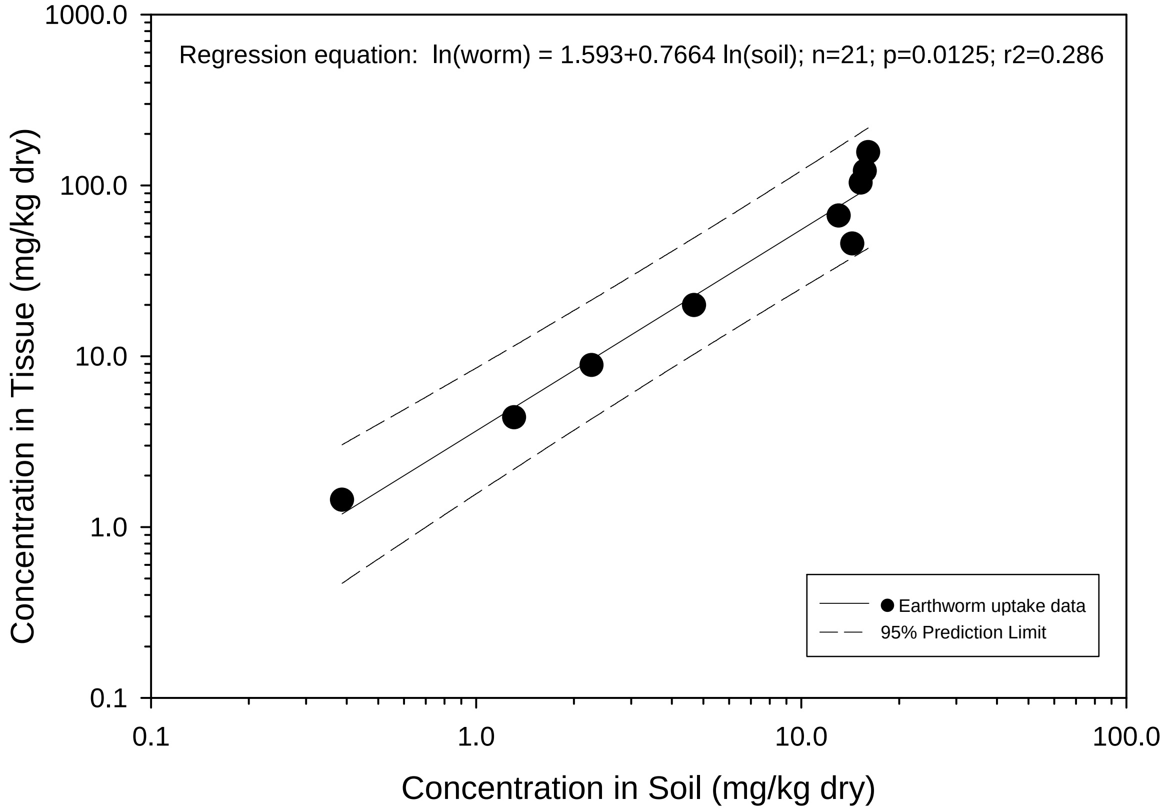

Figure 3.2-3. 2-ADNT in Soil to 2-ADNT in Earthworm (whole-body)

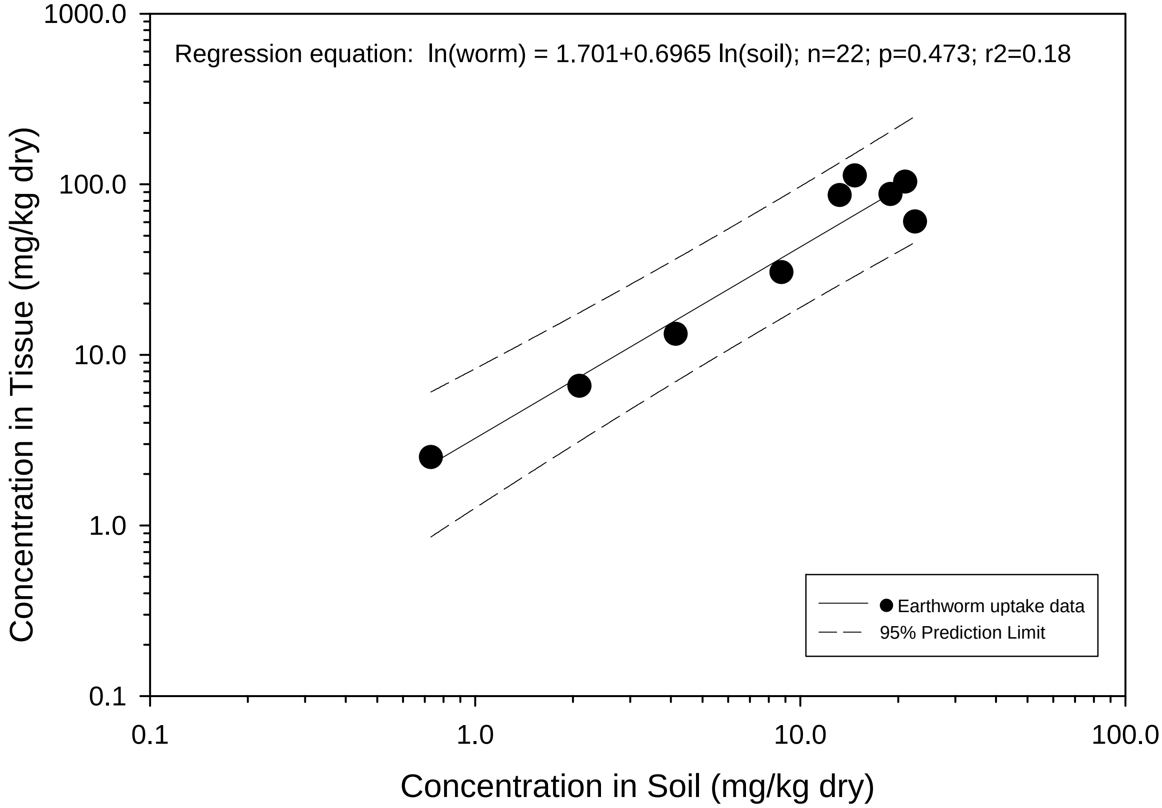

Figure 3.2-4. 4-ADNT in Soil to 4-ADNT in Earthworm (whole-body)

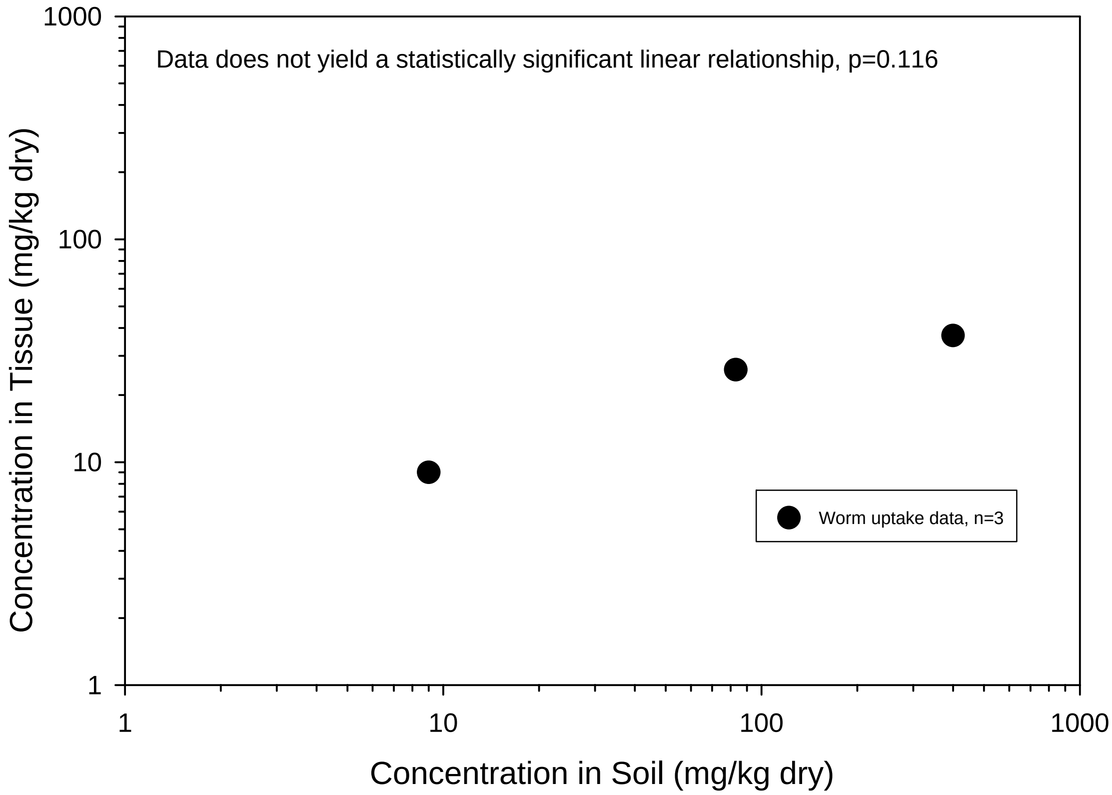

Figure 3.2-5. 2,4-DANT in Soil to 2,4-DANT in Earthworm (whole-body)

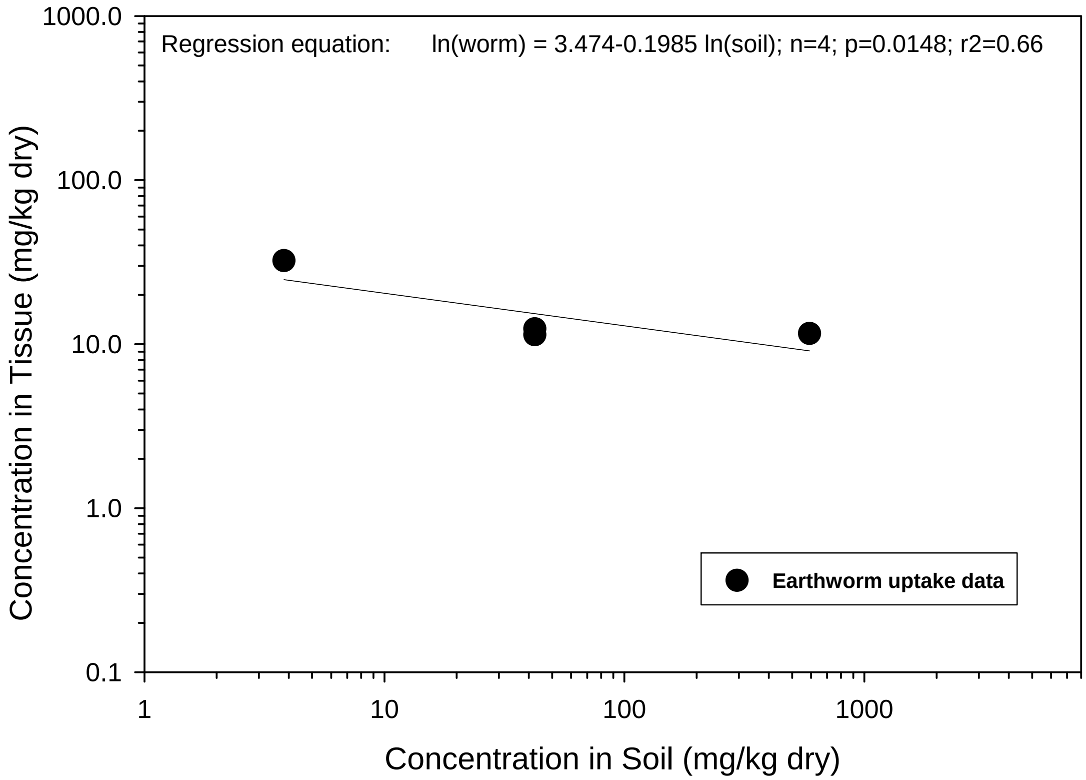

Figure 3.2-6. Perchlorate in Soil to Perchlorate in Earthworm (whole-body)

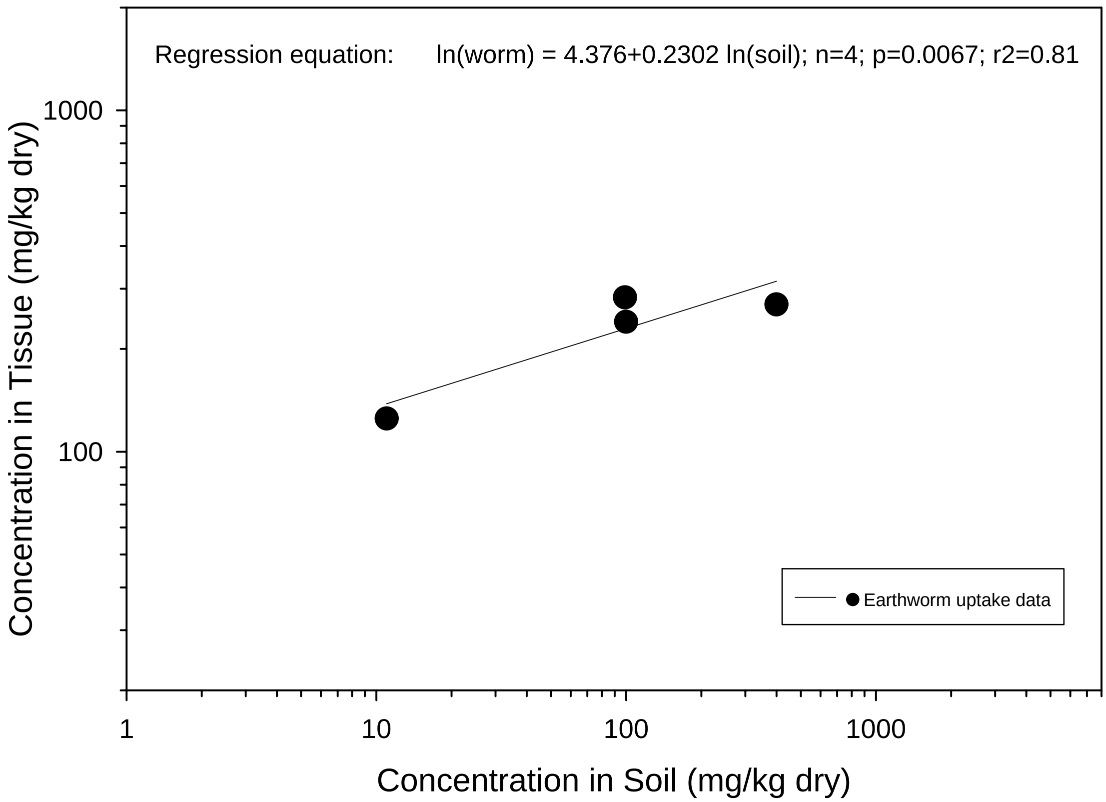

Figure 3.2-7. RDX in Soil to RDX in Earthworm (whole-body)

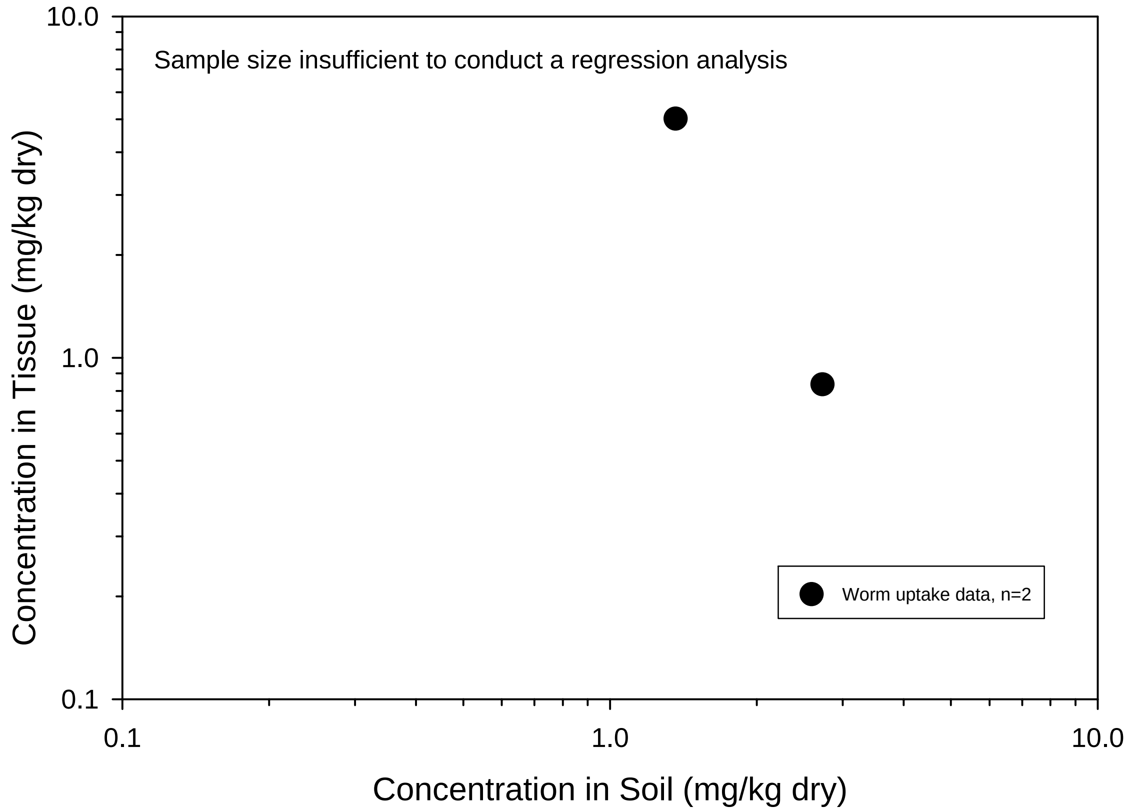

Figure 3.2-8. TNT in Soil to 2,4-DANT in Earthworm (whole-body)

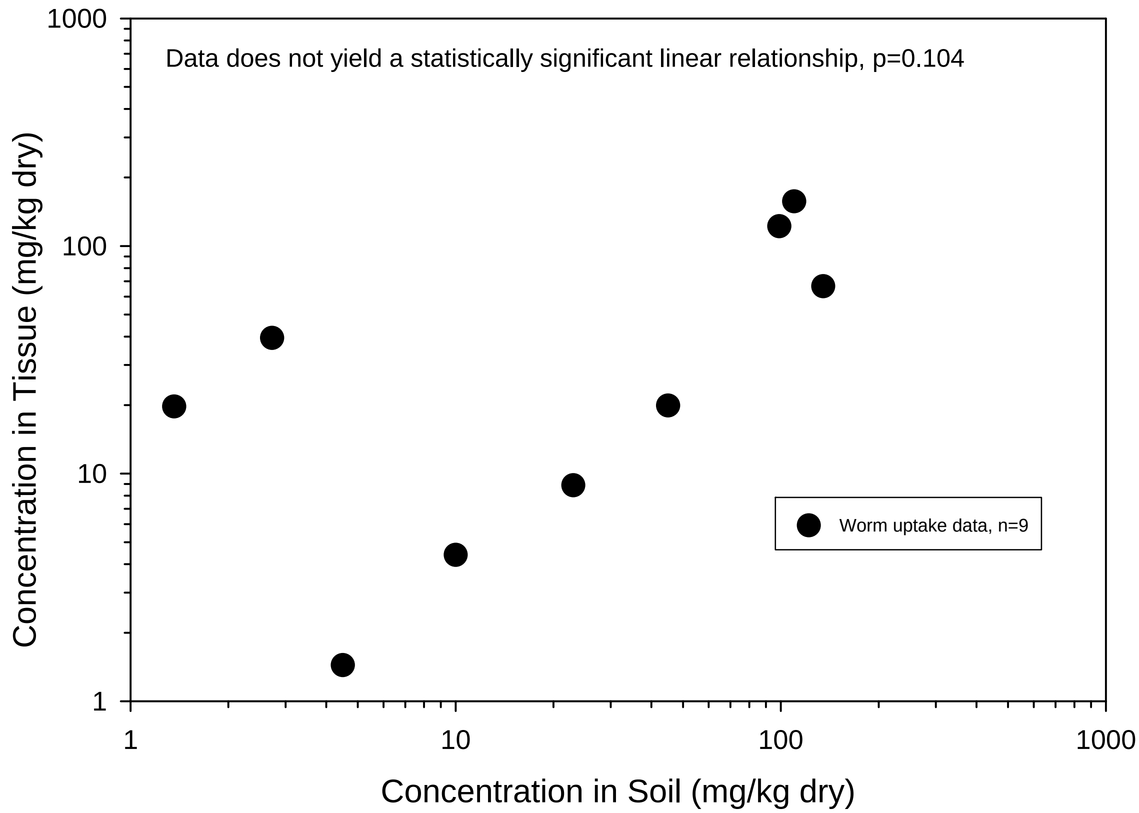

Figure 3.2-9. TNT in Soil to 2-ADNT in Earthworm (whole-body)

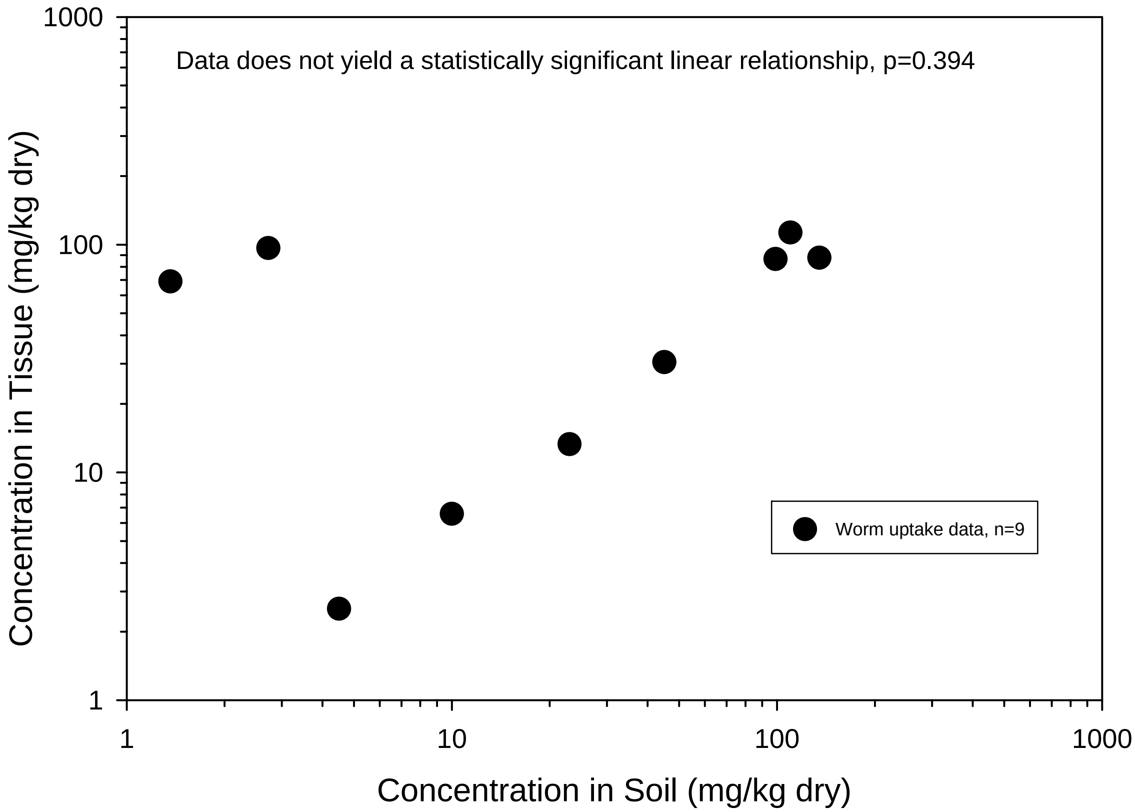

Figure 3.2-10. TNT in Soil to 4-ADNT in Earthworm (whole-body)

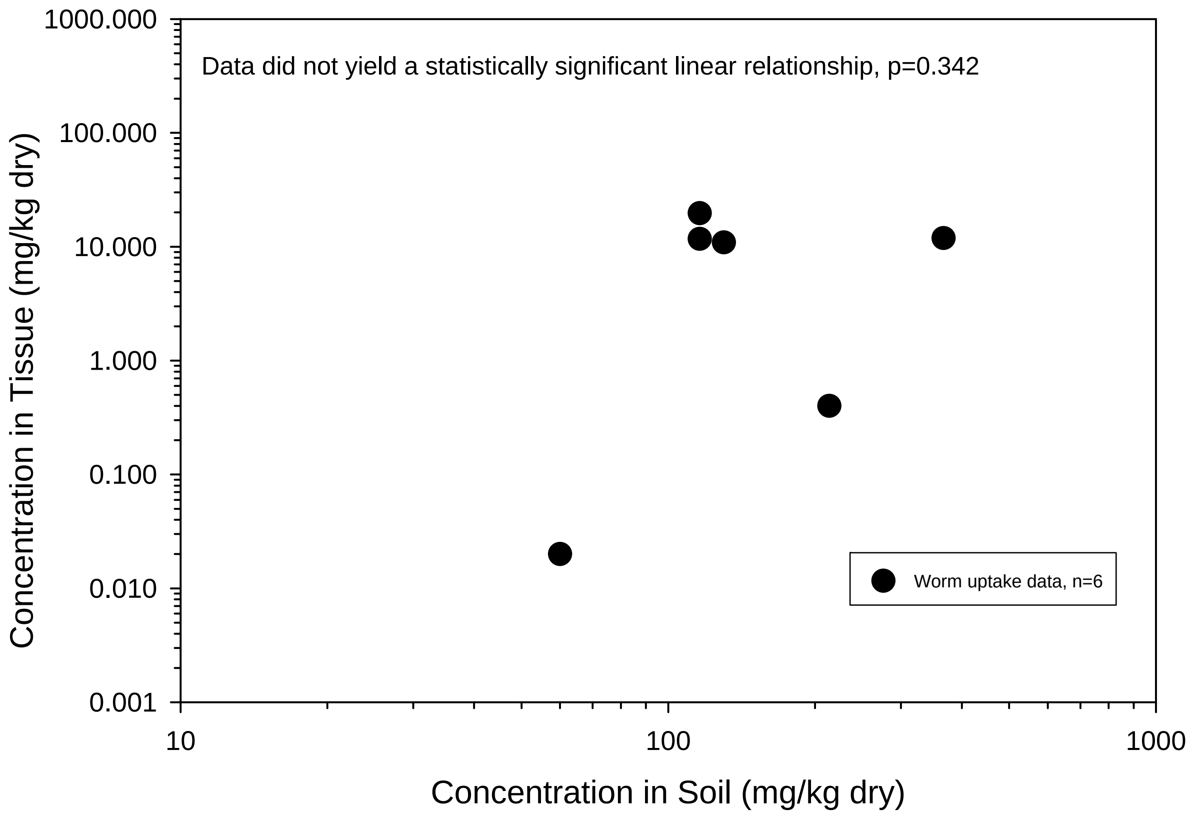

Figure 3.2-11. TNT in Soil to TNT in Earthworm (whole-body)

Appendix A-1

Plant Bioaccumulation (Uptake) Database

Appendix A-1. Plant Bioaccumulation (Uptake) Database

			Plant Species Characteristics									Experimental Condition					Soil Characteristics																
Record NO	Parent Analyte	Analyte in Tissue	Tissue	Monocot / Dicot	Tissue as Reported	Common Name	Class	Order	Family	Genus	Species	Location	Sub- location	Lab / Field	Duration	Duration Units	Soil Texture	EC	Soil_Ca	Soil_Mg	Nitrate	Bulk_Dens	Field_Capac	Tot_N%	K mg/kg	%Sand	%Silt	%Clay	p	pH	%OM	%OC	CEC
1	2,4-DNT	2,4-DNT	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	*Medicago sativa*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
2	2,4-DNT	2,4-DNT	Foliage	Monocot	Shoot	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	*Lolium perenne*	Lab	--	Lab	19	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
3	2,6-DNT	2,6-DNT	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	*Medicago sativa*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
4	2,6-DNT	2,6-DNT	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	*Medicago sativa*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
5	2,6-DNT	2,6-DNT	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	*Medicago sativa*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
6	2,6-DNT	2,6-DNT	Foliage	Monocot	Shoot	Japanese Millet	Liliopsida	Cyperales	Poaceae	Echinochloa	*Echinochloa esculenta*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
7	2,6-DNT	2,6-DNT	Foliage	Monocot	Shoot	Japanese Millet	Liliopsida	Cyperales	Poaceae	Echinochloa	*Echinochloa esculenta*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
8	2,6-DNT	2,6-DNT	Foliage	Monocot	Shoot	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	*Lolium perenne*	Lab	--	Lab	19	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
9	2,6-DNT	2,6-DNT	Foliage	Monocot	Shoot	Japanese Millet	Liliopsida	Cyperales	Poaceae	Echinochloa	*Echinochloa esculenta*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
10	2,6-DNT	2,6-DNT	Foliage	Monocot	Shoot	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	*Lolium perenne*	Lab	--	Lab	19	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
11	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
12	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
13	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
14	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
15	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
16	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
17	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
18	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
19	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
20	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
21	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
22	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
23	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
24	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
25	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
26	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
27	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
28	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
29	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
30	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
31	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
32	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
33	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
34	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
35	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	5	14.3	--	10
36	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	6	4.12	--	2.34
37	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	7	4.12	--	2.34
38	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	7	4.12	--	2.34
39	2ADNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	5	14.3	--	10
40	2ADNT	2ADNT	Root	Dicot	Root	Common Teasel	Magnoliopsida	Dipsacales	Dipsacaceae	Dipsacus	*Dipsacus sylvestris*	Joliet Army Am	6	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
41	2ADNT	2ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	8	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
42	2ADNT	2ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	14	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
43	2ADNT	2ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	13	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
44	2ADNT	2ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	9	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
45	2ADNT	2ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	6	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
46	2ADNT	2ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	12	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
47	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
48	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
49	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
50	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
51	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
52	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
53	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
54	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
55	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
56	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
57	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
58	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
59	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
60	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
61	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
62	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
63	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
64	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
65	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
66	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
67	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
68	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
69	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
70	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
71	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	5	14.3	--	10
72	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6	14.3	--	10
73	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	5	14.3	--	10
74	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6	14.3	--	10
75	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	7	14.3	--	10
76	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	8	14.3	--	10
77	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	5	4.12	--	2.34
78	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	6	4.12	--	2.34
79	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	6	4.12	--	2.34
80	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	6	4.12	--	2.34
81	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	7	4.12	--	2.34
82	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	7	4.12	--	2.34
83	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	7	4.12	--	2.34
84	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	8	4.12	--	2.34
85	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	5	14.3	--	10
86	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	5	14.3	--	10
87	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6	14.3	--	10
88	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6	14.3	--	10
89	4ADNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	7	14.3	--	10

Appendix A-1. Plant Bioaccumulation (Uptake) Database

Record NO	Soil Conc	Soil Qualifier	Soil Units	Soil Measured Conc	soil_wet_dry?	Water Conc	Water Units	Water Qualifier	Tissue Conc	Tissue Qualifier	Tissue Units	Reported BAF	N	Reference	Notes:
	Results														
1	15.8	Det	mg/kg-dw	M	dry-weight	--	--	--	2.3	Det	mg/kg-dry	0.15	4	Lachance et al. 2003	Source: Tbl 9/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
2	5.6	Det	mg/kg-dw	M	dry-weight	--	--	--	3.4	Det	mg/kg-dry	0.44	4	Lachance et al. 2003	Source: Tbl 9/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
3	0.4	Det	mg/kg-dw	M	dry-weight	--	--	--	4.4	Det	mg/kg-dry	0.54	4	Lachance et al. 2003	Source: Tbl 10/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
4	4.6	Det	mg/kg-dw	M	dry-weight	--	--	--	24	Det	mg/kg-dry	1.7	4	Lachance et al. 2003	Source: Tbl 10/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
5	2.7	Det	mg/kg-dw	M	dry-weight	--	--	--	3.4	Det	mg/kg-dry	0.64	4	Lachance et al. 2003	Source: Tbl 11/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
6	0.5	Det	mg/kg-dw	M	dry-weight	--	--	--	4	Det	mg/kg-dry	0.25	4	Lachance et al. 2003	Source: Tbl 10/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
7	2.7	Det	mg/kg-dw	M	dry-weight	--	--	--	9	Det	mg/kg-dry	0.64	4	Lachance et al. 2003	Source: Tbl 10/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
8	13	Det	mg/kg-dw	M	dry-weight	--	--	--	7.7	Det	mg/kg-dry	0.26	4	Lachance et al. 2003	Source: Tbl 10/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
9	3.3	Det	mg/kg-dw	M	dry-weight	--	--	--	9.7	Det	mg/kg-dry	1.8	4	Lachance et al. 2003	Source: Tbl 11/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
10	8.3	Det	mg/kg-dw	M	dry-weight	--	--	--	11	Det	mg/kg-dry	0.74	4	Lachance et al. 2003	Source: Tbl 11/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
11	12	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
12	1	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.4	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
13	0.75	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
14	0.89	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
15	1.8	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.1	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
16	9.8	Det	mg/kg-dw	M	presume dry-weight	--	--	--	3.1	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
17	1.3	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
18	5.4	Det	mg/kg-dw	M	presume dry-weight	--	--	--	3.8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
19	2.9	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.64	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
20	0.46	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.71	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
21	0.43	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.87	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
22	4.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
23	0.9	Det	mg/kg-dw	M	presume dry-weight	--	--	--	5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
24	1	Det	mg/kg-dw	M	presume dry-weight	--	--	--	5.5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
25	0.59	Det	mg/kg-dw	M	presume dry-weight	--	--	--	4.5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
26	1	Det	mg/kg-dw	M	presume dry-weight	--	--	--	4.1	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
27	1.2	Det	mg/kg-dw	M	presume dry-weight	--	--	--	4.3	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
28	0.26	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.2	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
29	3.9	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
30	0.89	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.3	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
31	2.2	Det	mg/kg-dw	M	presume dry-weight	--	--	--	18	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
32	1.6	Det	mg/kg-dw	M	presume dry-weight	--	--	--	12	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
33	4.4	Det	mg/kg-dw	M	presume dry-weight	--	--	--	9.5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
34	8	Det	mg/kg-dw	M	presume dry-weight	--	--	--	11	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
35	9.3	Det	mg/kg-dw	M	presume dry-weight	--	--	--	5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
36	8.5	Det	mg/kg-dw	M	presume dry-weight	--	--	--	7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
37	6.6	Det	mg/kg-dw	M	presume dry-weight	--	--	--	5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
38	9.4	Det	mg/kg-dw	M	presume dry-weight	--	--	--	8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
39	21	Det	mg/kg-dw	M	presume dry-weight	--	--	--	6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
40	6260	Det	mg/kg-dw	M	--	--	--	--	1.15	Det	--	--	--	Zellmer et al. 1995	--
41	278	Det	mg/kg-dw	M	--	--	--	--	1.28	Det	--	--	--	Zellmer et al. 1995	--
42	3350	Det	mg/kg-dw	M	--	--	--	--	1.13	Det	--	--	--	Zellmer et al. 1995	--
43	5340	Det	mg/kg-dw	M	--	--	--	--	3.2	Det	--	--	--	Zellmer et al. 1995	--
44	5840	Det	mg/kg-dw	M	--	--	--	--	7.71	Det	--	--	--	Zellmer et al. 1995	--
45	6260	Det	mg/kg-dw	M	--	--	--	--	4.43	Det	--	--	--	Zellmer et al. 1995	--
46	39350	Det	mg/kg-dw	M	--	--	--	--	4.35	Det	--	--	--	Zellmer et al. 1995	--
47	110	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
48	18	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
49	8.1	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
50	13	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
51	28	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
52	93	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
53	20	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
54	53	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.4	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
55	21	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.64	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
56	2.4	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.71	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
57	1.9	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.87	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
58	43	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.71	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
59	13	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.1	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
60	8.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.1	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
61	4.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
62	17	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
63	14	Det	mg/kg-dw	M	presume dry-weight	--	--	--	3.2	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
64	3.9	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.77	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
65	42	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
66	18	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
67	32	Det	mg/kg-dw	M	presume dry-weight	--	--	--	3.3	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
68	20	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
69	48	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
70	80	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
71	2.1	Det	mg/kg-dw	M	presume dry-weight	--	--	--	7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 100ug/g
72	2	Det	mg/kg-dw	M	presume dry-weight	--	--	--	6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 100ug/g
73	7.3	Det	mg/kg-dw	M	presume dry-weight	--	--	--	7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
74	4.2	Det	mg/kg-dw	M	presume dry-weight	--	--	--	5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
75	2.1	Det	mg/kg-dw	M	presume dry-weight	--	--	--	7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
76	2.5	Det	mg/kg-dw	M	presume dry-weight	--	--	--	7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
77	10	Det	mg/kg-dw	M	presume dry-weight	--	--	--	25	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
78	5	Det	mg/kg-dw	M	presume dry-weight	--	--	--	7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
79	10	Det	mg/kg-dw	M	presume dry-weight	--	--	--	6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
80	2.8	Det	mg/kg-dw	M	presume dry-weight	--	--	--	6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
81	3.8	Det	mg/kg-dw	M	presume dry-weight	--	--	--	8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
82	1.9	Det	mg/kg-dw	M	presume dry-weight	--	--	--	6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
83	3.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
84	3.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
85	18	Det	mg/kg-dw	M	presume dry-weight	--	--	--	8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
86	20	Det	mg/kg-dw	M	presume dry-weight	--	--	--	7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
87	8.8	Det	mg/kg-dw	M	presume dry-weight	--	--	--	10	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
88	14	Det	mg/kg-dw	M	presume dry-weight	--	--	--	6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
89	11	Det	mg/kg-dw	M	presume dry-weight	--	--	--	6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g

Appendix A-1. Plant Bioaccumulation (Uptake) Database

			Plant Species Characteristics									Experimental Condition						Soil Characteristics															
Record NO	Parent Analyte	Analyte in Tissue	Tissue	Monocot / Dicot	Tissue as Reported	Common Name	Class	Order	Family	Genus	Species	Location	Sub- location	Lab / Field	Duration	Duration Units	Soil Texture	EC	Soil_Ca	Soil_Mg	Nitrate	Bulk_Dens	Field_Capac	Tot_N%	K mg/kg	%Sand	%Silt	%Clay	p	pH	%OM	%OC	CEC
90	4ADNT	4ADNT	Root	Dicot	Root	Common Teasel	Magnoliopsida	Dipsacales	Dipsacaceae	Dipsacus	*Dipsacus sylvestris*	Joliet Army Am	7	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
91	4ADNT	4ADNT	Root	Dicot	Root	Common Teasel	Magnoliopsida	Dipsacales	Dipsacaceae	Dipsacus	*Dipsacus sylvestris*	Joliet Army Am	6	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
92	4ADNT	4ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	8	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
93	4ADNT	4ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	7	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
94	4ADNT	4ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	14	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
95	4ADNT	4ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	13	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
96	4ADNT	4ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	9	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
97	4ADNT	4ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	6	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
98	4ADNT	4ADNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	12	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
99	HMX	HMX	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	*Medicago sativa*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
100	HMX	HMX	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	*Medicago sativa*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
101	HMX	HMX	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	*Medicago sativa*	Lab	--	Lab	28	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
102	HMX	HMX	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	*Medicago sativa*	Lab	--	Lab	28	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
103	HMX	HMX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	*Lactuca sativa*	Lab	S1W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
104	HMX	HMX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	*Lactuca sativa*	Lab	S1W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
105	HMX	HMX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	*Lactuca sativa*	Lab	S1W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
106	HMX	HMX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	*Lactuca sativa*	Lab	S1W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
107	HMX	HMX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	*Lactuca sativa*	Lab	S1W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
108	HMX	HMX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	*Lactuca sativa*	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
109	HMX	HMX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	*Lactuca sativa*	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
110	HMX	HMX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	*Lactuca sativa*	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
111	HMX	HMX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	*Lactuca sativa*	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
112	HMX	HMX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	*Lactuca sativa*	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
113	HMX	HMX	Foliage	Dicot	Leaf	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	*Medicago sativa*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
114	HMX	HMX	Foliage	Dicot	Leaf	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
115	HMX	HMX	Foliage	Dicot	Leaf	Canola	Magnoliopsida	Capparales	Brassicaceae	Brassica	*Brassica rapa*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
116	HMX	HMX	Foliage	Dicot	Leaf	Wild Bergamot	Magnoliopsida	Lamiales	Lamiaceae	Monarda	*Monarda fistulosa*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
117	HMX	HMX	Foliage	Dicot	Leaf	Wild Bergamot	Magnoliopsida	Lamiales	Lamiaceae	Monarda	*Monarda fistulosa*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
118	HMX	HMX	Foliage	Dicot	Leaf	Wild Bergamot	Magnoliopsida	Lamiales	Lamiaceae	Monarda	*Monarda fistulosa*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
119	HMX	HMX	Foliage	Dicot	Leaf	Blueberry	Magnoliopsida	Ericales	Ericaceae	Vaccinium	*Vaccinium sp.*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
120	HMX	HMX	Foliage	Dicot	Leaf	Blueberry	Magnoliopsida	Ericales	Ericaceae	Vaccinium	*Vaccinium sp.*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
121	HMX	HMX	Foliage	Dicot	Leaf	Blueberry	Magnoliopsida	Ericales	Ericaceae	Vaccinium	*Vaccinium sp.*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
122	HMX	HMX	Foliage	Dicot	Leaf	Anemone Sp.	Magnoliopsida	Ranunculales	Ranunculacea	Anemone	*Anemone sp.*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
123	HMX	HMX	Foliage	Dicot	Leaf	Anemone Sp.	Magnoliopsida	Ranunculales	Ranunculacea	Anemone	*Anemone sp.*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
124	HMX	HMX	Foliage	Dicot	Leaf	Anemone Sp.	Magnoliopsida	Ranunculales	Ranunculacea	Anemone	*Anemone sp.*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
125	HMX	HMX	Foliage	Dicot	Leaf	Common Thistle	Magnoliopsida	Asterales	Asteraceae	Circium	*Circium vulgare*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
126	HMX	HMX	Foliage	Dicot	Leaf	Common Thistle	Magnoliopsida	Asterales	Asteraceae	Circium	*Circium vulgare*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
127	HMX	HMX	Foliage	Dicot	Leaf	Common Thistle	Magnoliopsida	Asterales	Asteraceae	Circium	*Circium vulgare*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
128	HMX	HMX	Foliage	Dicot	Leaf	Wax Berry	Magnoliopsida	Dipsacales	Caprifoliaceae	Symphoricarp	*Symphoricarpos albus*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
129	HMX	HMX	Foliage	Dicot	Leaf	Wax Berry	Magnoliopsida	Dipsacales	Caprifoliaceae	Symphoricarp	*Symphoricarpos albus*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
130	HMX	HMX	Foliage	Dicot	Leaf	Wax Berry	Magnoliopsida	Dipsacales	Caprifoliaceae	Symphoricarp	*Symphoricarpos albus*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
131	HMX	HMX	Foliage	Dicot	Leaf	Western Sage	Magnoliopsida	Asterales	Asteraceae	Artemisia	*Artemisia gnaphalodes*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
132	HMX	HMX	Foliage	Dicot	Leaf	Western Sage	Magnoliopsida	Asterales	Asteraceae	Artemisia	*Artemisia gnaphalodes*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
133	HMX	HMX	Foliage	Dicot	Leaf	Western Sage	Magnoliopsida	Asterales	Asteraceae	Artemisia	*Artemisia gnaphalodes*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
134	HMX	HMX	Foliage	Monocot	Shoot	Japanese Millet	Liliopsida	Cyperales	Poaceae	Echinochloa	*Echinochloa esculenta*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
135	HMX	HMX	Foliage	Monocot	Shoot	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	*Lolium perenne*	Lab	--	Lab	19	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
136	HMX	HMX	Foliage	Monocot	Shoot	Japanese Millet	Liliopsida	Cyperales	Poaceae	Echinochloa	*Echinochloa esculenta*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
137	HMX	HMX	Foliage	Monocot	Shoot	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	*Lolium perenne*	Lab	--	Lab	19	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
138	HMX	HMX	Foliage	Monocot	Shoot	Japanese Millet	Liliopsida	Cyperales	Poaceae	Echinochloa	*Echinochloa esculenta*	Lab	--	Lab	28	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
139	HMX	HMX	Foliage	Monocot	Shoot	Japanese Millet	Liliopsida	Cyperales	Poaceae	Echinochloa	*Echinochloa esculenta*	Lab	--	Lab	28	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
140	HMX	HMX	Foliage	Monocot	Shoot	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	*Lolium perenne*	Lab	--	Lab	28	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
141	HMX	HMX	Foliage	Monocot	Shoot	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	*Lolium perenne*	Lab	--	Lab	28	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
142	HMX	HMX	Foliage	Monocot	Shoot	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	S1W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
143	HMX	HMX	Foliage	Monocot	Shoot	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
144	HMX	HMX	Foliage	Monocot	Shoot	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
145	HMX	HMX	Foliage	Monocot	Shoot	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
146	HMX	HMX	Foliage	Monocot	Shoot	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
147	HMX	HMX	Foliage	Monocot	Shoot	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
148	HMX	HMX	Foliage	Monocot	Stalk, leaves,	Corn	Liliopsida	Cyperales	Poaceae	Zea	*Zea mays*	Lab	S3W0	Lab	76-80	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
149	HMX	HMX	Foliage	Monocot	Stalk, leaves,	Corn	Liliopsida	Cyperales	Poaceae	Zea	*Zea mays*	Lab	S3W0	Lab	76-80	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
150	HMX	HMX	Foliage	Monocot	Stalk, leaves,	Corn	Liliopsida	Cyperales	Poaceae	Zea	*Zea mays*	Lab	S3W0	Lab	76-80	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
151	HMX	HMX	Foliage	Monocot	Stalk, leaves,	Corn	Liliopsida	Cyperales	Poaceae	Zea	*Zea mays*	Lab	S3W0	Lab	76-80	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
152	HMX	HMX	Foliage	Monocot	Leaf	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
153	HMX	HMX	Foliage	Monocot	Leaf	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	*Lolium perenne*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
154	HMX	HMX	Foliage	Monocot	Leaf	Western Wheat Grass	Liliopsida	Cyperales	Poaceae	Agropyron	*Agropyron smithii*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
155	HMX	HMX	Foliage	Monocot	Leaf	Western Wheat Grass	Liliopsida	Cyperales	Poaceae	Agropyron	*Agropyron smithii*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
156	HMX	HMX	Foliage	Monocot	Leaf	Western Wheat Grass	Liliopsida	Cyperales	Poaceae	Agropyron	*Agropyron smithii*	Wainwright Firi	--	Field	Resident	--	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
157	HMX	HMX	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
158	HMX	HMX	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
159	HMX	HMX	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
160	HMX	HMX	Root	Dicot	Root	Canola	Magnoliopsida	Capparales	Brassicaceae	Brassica	*Brassica rapa*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
161	HMX	HMX	Root	Dicot	Root	Canola	Magnoliopsida	Capparales	Brassicaceae	Brassica	*Brassica rapa*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
162	HMX	HMX	Root	Dicot	Root	Canola	Magnoliopsida	Capparales	Brassicaceae	Brassica	*Brassica rapa*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
163	HMX	HMX	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
164	HMX	HMX	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
165	HMX	HMX	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
166	HMX	HMX	Root	Monocot	Root	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	*Lolium perenne*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
167	HMX	HMX	Root	Monocot	Root	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	*Lolium perenne*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
168	HMX	HMX	Root	Monocot	Root	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	*Lolium perenne*	Wainwright Firi	--	Lab	77	Days	--	--	--	--	--	--	--	--	--	59	25	16	< 2.5	7.52	--	2.1	18
169	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Vegetation pa	Water Pepper	Magnoliopsida	Polygonales	Polygonaceae	Polygonum	*Polygonum Hydropiper*	Indian Head Ar	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
170	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Vegetation pa	Water Pepper	Magnoliopsida	Polygonales	Polygonaceae	Polygonum	*Polygonum Hydropiper*	Indian Head Ar	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
171	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	*Medicago sativa*	Yuma	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
172	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Arrowweed	Magnoliopsida	Asterales	Asteraceae	Pluchea	*Pluchea sericea (Nutt.) Coville*	Yuma	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
173	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Arrowweed	Magnoliopsida	Asterales	Asteraceae	Pluchea	*Pluchea sericea (Nutt.) Coville*	Yuma	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
174	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Arrowweed	Magnoliopsida	Asterales	Asteraceae	Pluchea	*Pluchea sericea (Nutt.) Coville*	Yuma	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
175	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Honey Mesquite	Magnoliopsida	Fabales	Poaceae	Prosopis	*Prosopis glandulosa Torr.*	Yuma	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
176	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Leaf	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	*Tamarix ramosissima Ledeb.*	Yuma	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
177	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Leaf	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	*Tamarix ramosissima Ledeb.*	Yuma	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
178	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Leaf	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	*Tamarix ramosissima Ledeb.*	Yuma	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
179	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Leaf	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	*Tamarix ramosissima Ledeb.*	Yuma	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
180	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Quail Bush	Magnoliopsida	Caryophyllales	Chenopodiace	Atriplex	*Atriplex lentiformis (Torr.) S. Wats.*	Yuma	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix A-1. Plant Bioaccumulation (Uptake) Database

Record NO	Soil Conc	Soil Qualifier	Soil Units	Soil Measured Conc	soil_wet_dry?	Water Conc	Water Units	Water Qualifier	Tissue Conc	Tissue Qualifier	Tissue Units	Reported BAF	N	Reference	Notes:
	Results														
90	492	Det	mg/kg-dw	M	--	--	--	--	0.57	Det	--	--	--	Zellmer et al. 1995	--
91	6260	Det	mg/kg-dw	M	--	--	--	--	2.12	Det	--	--	--	Zellmer et al. 1995	--
92	278	Det	mg/kg-dw	M	--	--	--	--	0.88	Det	--	--	--	Zellmer et al. 1995	--
93	492	Det	mg/kg-dw	M	--	--	--	--	0.63	Det	--	--	--	Zellmer et al. 1995	--
94	3350	Det	mg/kg-dw	M	--	--	--	--	1.55	Det	--	--	--	Zellmer et al. 1995	--
95	5340	Det	mg/kg-dw	M	--	--	--	--	2.74	Det	--	--	--	Zellmer et al. 1995	--
96	5840	Det	mg/kg-dw	M	--	--	--	--	5.71	Det	--	--	--	Zellmer et al. 1995	--
97	6260	Det	mg/kg-dw	M	--	--	--	--	4.29	Det	--	--	--	Zellmer et al. 1995	--
98	39350	Det	mg/kg-dw	M	--	--	--	--	3.72	Det	--	--	--	Zellmer et al. 1995	--
99	9427	Det	mg/kg-dw	M	dry-weight	--	--	--	9427	Det	mg/kg-dry	0.028	4	Lachance et al. 2003	Source: Tbl 14/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
100	9845	Det	mg/kg-dw	M	dry-weight	--	--	--	9845	Det	mg/kg-dry	0.037	4	Lachance et al. 2003	Source: Tbl 15/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
101	101	Det	mg/kg-dw	M	dry-weight	--	--	--	218	Det	mg/kg-dry	2.2	4	Lachance et al. 2003	Source: Tbl 18/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
102	1126	Det	mg/kg-dw	M	dry-weight	--	--	--	253	Det	mg/kg-dry	0.22	4	Lachance et al. 2003	Source: Tbl 18/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
103	1.01	Det	mg/kg-dw	M	dry-weight	--	--	--	77.8	Det	mg/kg-dry	--	5	Price et al. 1997	--
104	1.01	Det	mg/kg-dw	M	dry-weight	--	--	--	89.4	Det	mg/kg-dry	--	5	Price et al. 1997	--
105	1.01	Det	mg/kg-dw	M	dry-weight	--	--	--	132.5	Det	mg/kg-dry	--	5	Price et al. 1997	--
106	1.01	Det	mg/kg-dw	M	dry-weight	--	--	--	124.2	Det	mg/kg-dry	--	5	Price et al. 1997	--
107	1.01	Det	mg/kg-dw	M	dry-weight	--	--	--	84.5	Det	mg/kg-dry	--	5	Price et al. 1997	--
108	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	770.2	Det	mg/kg-dry	--	5	Price et al. 1997	--
109	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	712.2	Det	mg/kg-dry	--	5	Price et al. 1997	--
110	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	1016.6	Det	mg/kg-dry	--	5	Price et al. 1997	--
111	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	873.7	Det	mg/kg-dry	--	5	Price et al. 1997	--
112	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	1089	Det	mg/kg-dry	--	5	Price et al. 1997	--
113	30.9333	Det	mg/kg-dw	M	dry-weight	--	--	--	227	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
114	28.3	Det	mg/kg-dw	M	dry-weight	--	--	--	62	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
115	35.333	Det	mg/kg-dw	M	dry-weight	--	--	--	107	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
116	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	52	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
117	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	49	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
118	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	59	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
119	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	12	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
120	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	9.4	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
121	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	11	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
122	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	79	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
123	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	83	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
124	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	78	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
125	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	24	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
126	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	22.8	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
127	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	21	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
128	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	8	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
129	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	8.8	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
130	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	9	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
131	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	27.8	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
132	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	24	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
133	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	28	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
134	8597	Det	mg/kg-dw	M	dry-weight	--	--	--	8597	Det	mg/kg-dry	0.013	4	Lachance et al. 2003	Source: Tbl 14/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
135	9064	Det	mg/kg-dw	M	dry-weight	--	--	--	9064	Det	mg/kg-dry	0.017	4	Lachance et al. 2003	Source: Tbl 14/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
136	9048	Det	mg/kg-dw	M	dry-weight	--	--	--	9048	Det	mg/kg-dry	0.026	4	Lachance et al. 2003	Source: Tbl 15/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
137	9161	Det	mg/kg-dw	M	dry-weight	--	--	--	9161	Det	mg/kg-dry	0.018	4	Lachance et al. 2003	Source: Tbl 15/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
138	101	Det	mg/kg-dw	M	dry-weight	--	--	--	216	Det	mg/kg-dry	2.16	4	Lachance et al. 2003	Source: Tbl 18/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
139	1123	Det	mg/kg-dw	M	dry-weight	--	--	--	400	Det	mg/kg-dry	0.36	4	Lachance et al. 2003	Source: Tbl 18/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
140	102	Det	mg/kg-dw	M	dry-weight	--	--	--	148	Det	mg/kg-dry	1.47	4	Lachance et al. 2003	Source: Tbl 18/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
141	1129	Det	mg/kg-dw	M	dry-weight	--	--	--	141	Det	mg/kg-dry	0.13	4	Lachance et al. 2003	Source: Tbl 18/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
142	1.01	Det	mg/kg-dw	M	dry-weight	--	--	--	18	Det	mg/kg-dry	--	5	Price et al. 1997	--
143	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	24.6	Det	mg/kg-dry	--	5	Price et al. 1997	--
144	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	30.4	Det	mg/kg-dry	--	5	Price et al. 1997	--
145	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	27.3	Det	mg/kg-dry	--	5	Price et al. 1997	--
146	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	41	Det	mg/kg-dry	--	5	Price et al. 1997	--
147	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	24.2	Det	mg/kg-dry	--	5	Price et al. 1997	--
148	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	12.5	Det	mg/kg-dry	--	5	Price et al. 1997	--
149	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	10.1	Det	mg/kg-dry	--	5	Price et al. 1997	--
150	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	14.2	Det	mg/kg-dry	--	5	Price et al. 1997	--
151	8.63	Det	mg/kg-dw	M	dry-weight	--	--	--	26.4	Det	mg/kg-dry	--	5	Price et al. 1997	--
152	30.1667	Det	mg/kg-dw	M	dry-weight	--	--	--	196	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
153	28.3	Det	mg/kg-dw	M	dry-weight	--	--	--	389	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
154	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	108	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
155	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	114	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
156	32.3	Det	mg/kg-dw	M	dry-weight	--	--	--	117	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
157	28.3	Det	mg/kg-dw	M	dry-weight	--	--	--	8	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
158	28.3	Det	mg/kg-dw	M	dry-weight	--	--	--	7.5	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
159	28.3	Det	mg/kg-dw	M	dry-weight	--	--	--	9	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
160	35.333	Det	mg/kg-dw	M	dry-weight	--	--	--	7.5	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
161	35.333	Det	mg/kg-dw	M	dry-weight	--	--	--	6.8	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
162	35.333	Det	mg/kg-dw	M	dry-weight	--	--	--	8.5	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
163	30.1667	Det	mg/kg-dw	M	dry-weight	--	--	--	5.3	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
164	30.1667	Det	mg/kg-dw	M	dry-weight	--	--	--	6.1	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
165	30.1667	Det	mg/kg-dw	M	dry-weight	--	--	--	5.6	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
166	28.3	Det	mg/kg-dw	M	dry-weight	--	--	--	6.1	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
167	28.3	Det	mg/kg-dw	M	dry-weight	--	--	--	5.9	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
168	28.3	Det	mg/kg-dw	M	dry-weight	--	--	--	6	Det	mg/kg-dry	--	--	Groom et al. 2002	Source from per. comm with C.A. Groom
169	1.5288	Det	mg/kg-dw	M	dry-weight	--	--	--	2	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: /Biotic Moisture: %/Det Freq of the Abiotic Medium:
170	1.5288	Det	mg/kg-dw	M	dry-weight	--	--	--	3.3	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: /Biotic Moisture: %/Det Freq of the Abiotic Medium:
171	0.04908	Det	mg/kg-dw	M	dry-weight	--	--	--	4.4	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 24/Biotic Moisture: 77%/Det Freq of the Abiotic Medium: 1/6
172	0.04908	Det	mg/kg-dw	M	dry-weight	--	--	--	0.9	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 25/Biotic Moisture: 62%/Det Freq of the Abiotic Medium: 1/6
173	0.04908	Det	mg/kg-dw	M	dry-weight	--	--	--	0.9	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 26/Biotic Moisture: 63%/Det Freq of the Abiotic Medium: 1/6
174	0.04908	Det	mg/kg-dw	M	dry-weight	--	--	--	1.2	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 27/Biotic Moisture: 62%/Det Freq of the Abiotic Medium: 1/6
175	0.04908	Det	mg/kg-dw	M	dry-weight	--	--	--	0.9	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 28/Biotic Moisture: 63%/Det Freq of the Abiotic Medium: 1/6
176	0.04908	Det	mg/kg-dw	M	dry-weight	--	--	--	0.8	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 30/Biotic Moisture: 60%/Det Freq of the Abiotic Medium: 1/6
177	0.04908	Det	mg/kg-dw	M	dry-weight	--	--	--	1.5	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 31/Biotic Moisture: 63%/Det Freq of the Abiotic Medium: 1/6
178	0.04908	Det	mg/kg-dw	M	dry-weight	--	--	--	1.6	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 32/Biotic Moisture: 67%/Det Freq of the Abiotic Medium: 1/6
179	0.04908	Det	mg/kg-dw	M	dry-weight	--	--	--	2	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 33/Biotic Moisture: 58%/Det Freq of the Abiotic Medium: 1/6
180	0.04908	Det	mg/kg-dw	M	dry-weight	--	--	--	2.6	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 34/Biotic Moisture: 66%/Det Freq of the Abiotic Medium: 1/6

Appendix A-1. Plant Bioaccumulation (Uptake) Database

Record NO	Parent Analyte	Analyte in Tissue	Tissue	Monocot / Dicot	Tissue as Reported	Common Name	Class	Order	Family	Genus	Species	Location	Sub- location	Lab / Field	Duration	Duration Units	Soil Texture	EC	Soil_Ca	Soil_Mg	Nitrate	Bulk_Dens	Field_Capac	Tot_N%	K mg/kg	%Sand	%Silt	%Clay	p	pH	%OM	%OC	CEC
			Plant Species Characteristics									Experimental Condition						Soil Characteristics															
181	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Leaf	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	Tamarix ramosissima Ledeb.	Mead Area	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
182	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Leaf	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	Tamarix ramosissima Ledeb.	Mead Area	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
183	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Leaf	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	Tamarix ramosissima Ledeb.	Mead Area	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
184	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Litter	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	Tamarix ramosissima Ledeb.	Mead Area	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
185	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Litter	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	Tamarix ramosissima Ledeb.	Mead Area	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
186	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Litter	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	Tamarix ramosissima Ledeb.	Mead Area	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
187	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Grass	Magnoliopsida	Fabales	Poaceae	--	--	Mead Area	5	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
188	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Grass	Magnoliopsida	Fabales	Poaceae	--	--	Mead Area	5	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
189	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Grass	Magnoliopsida	Fabales	Poaceae	--	--	Mead Area	5	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
190	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Grass	Magnoliopsida	Fabales	Poaceae	--	--	Mead Area	5	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
191	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Grass	Magnoliopsida	Fabales	Poaceae	--	--	Mead Area	5	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
192	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Pickleweed	Magnoliopsida	Caryophyllales	Chenopodiaceae	Salicornia	Salicornia europaea	Holloman AFB	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
193	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Fourwing Saltbush	Magnoliopsida	Caryophyllales	Chenopodiaceae	Atriplex	Atriplex canescens (Pursh) Nutt.	Holloman AFB	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
194	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Fourwing Saltbush	Magnoliopsida	Caryophyllales	Chenopodiaceae	Atriplex	Atriplex canescens (Pursh) Nutt.	Holloman AFB	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
195	Perchlorate anion	Perchlorate anion	Foliage	Dicot	Shoot	Fourwing Saltbush	Magnoliopsida	Caryophyllales	Chenopodiaceae	Atriplex	Atriplex canescens (Pursh) Nutt.	Holloman AFB	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
196	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bulrush	Liliopsida	Cyperales	Cyperaceae	Scirpus	Scirpus microcarpus J.& K. Presl	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
197	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bulrush	Liliopsida	Cyperales	Cyperaceae	Scirpus	Scirpus microcarpus J.& K. Presl	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
198	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bulrush	Liliopsida	Cyperales	Cyperaceae	Scirpus	Scirpus microcarpus J.& K. Presl	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
199	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bulrush	Liliopsida	Cyperales	Cyperaceae	Scirpus	Scirpus microcarpus J.& K. Presl	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bulrush	Liliopsida	Cyperales	Cyperaceae	Scirpus	Scirpus microcarpus J.& K. Presl	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
201	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bermuda Grass	Liliopsida	Cyperales	Poaceae	Cynodon	Cynodon dactylon	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
202	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bermuda Grass	Liliopsida	Cyperales	Poaceae	Cynodon	Cynodon dactylon	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
203	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bermuda Grass	Liliopsida	Cyperales	Poaceae	Cynodon	Cynodon dactylon	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
204	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bermuda Grass	Liliopsida	Cyperales	Poaceae	Cynodon	Cynodon dactylon	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
205	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bermuda Grass	Liliopsida	Cyperales	Poaceae	Cynodon	Cynodon dactylon	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
206	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Phragmites	Liliopsida	Cyperales	Poaceae	Phragmites	Phragmites australis (Cav.) Trin. ex Steud.	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
207	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Phragmites	Liliopsida	Cyperales	Poaceae	Phragmites	Phragmites australis (Cav.) Trin. ex Steud.	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
208	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Phragmites	Liliopsida	Cyperales	Poaceae	Phragmites	Phragmites australis (Cav.) Trin. ex Steud.	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
209	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Phragmites	Liliopsida	Cyperales	Poaceae	Phragmites	Phragmites australis (Cav.) Trin. ex Steud.	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
210	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Phragmites	Liliopsida	Cyperales	Poaceae	Phragmites	Phragmites australis (Cav.) Trin. ex Steud.	Mead Area	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
211	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bulrush	Liliopsida	Cyperales	Cyperaceae	Scirpus	Scirpus microcarpus J.& K. Presl	Mead Area	5	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
212	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bulrush	Liliopsida	Cyperales	Cyperaceae	Scirpus	Scirpus microcarpus J.& K. Presl	Mead Area	5	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
213	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bulrush	Liliopsida	Cyperales	Cyperaceae	Scirpus	Scirpus microcarpus J.& K. Presl	Mead Area	5	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
214	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Bulrush	Liliopsida	Cyperales	Cyperaceae	Scirpus	Scirpus microcarpus J.& K. Presl	Mead Area	5	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
215	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
216	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
217	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
218	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
219	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
220	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
221	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
222	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
223	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
224	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
225	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
226	Perchlorate anion	Perchlorate anion	Foliage	Monocot	Shoot	Johnson Grass	Liliopsida	Cyperales	Poaceae	Sorghum	Sorghum halepense (L.) Pers.	ABL	3	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
227	Perchlorate anion	Perchlorate anion	Seed	Dicot	Seed	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	Tamarix ramosissima Ledeb.	Mead Area	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
228	Perchlorate anion	Perchlorate anion	Seed	Dicot	Seed	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	Tamarix ramosissima Ledeb.	Mead Area	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
229	Perchlorate anion	Perchlorate anion	Seed	Dicot	Seed	Salt Cedar	Magnoliopsida	Violales	Tamaricaceae	Tamarix	Tamarix ramosissima Ledeb.	Mead Area	1	Field	Resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
230	RDX	RDX	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	Medicago sativa	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
231	RDX	RDX	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	Medicago sativa	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
232	RDX	RDX	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	Medicago sativa	Lab	--	Lab	42	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
233	RDX	RDX	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	Medicago sativa	Lab	--	Lab	42	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
234	RDX	RDX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	Lactuca sativa	Lab	S1W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
235	RDX	RDX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	Lactuca sativa	Lab	S2W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
236	RDX	RDX	Foliage	Dicot	Shoot	Lettuce	Magnoliopsida	Asterales	Asteraceae	Lactuca	Lactuca sativa	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
237	RDX	RDX	Foliage	Dicot	Leaf	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	Phaseolus vulgaris	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
238	RDX	RDX	Foliage	Dicot	Leaf	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	Phaseolus vulgaris	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
239	RDX	RDX	Foliage	Dicot	Leaf	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	Phaseolus vulgaris	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
240	RDX	RDX	Foliage	Dicot	Stem	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	Phaseolus vulgaris	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
241	RDX	RDX	Foliage	Dicot	Stem	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	Phaseolus vulgaris	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
242	RDX	RDX	Foliage	Dicot	Stem	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	Phaseolus vulgaris	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
243	RDX	RDX	Foliage	Dicot	Leaf/Stem	Smartweed	Magnoliopsida	Polygonales	Poliganaceae	Polygonum	Polygonum sp.	Iowa Army Am	1	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
244	RDX	RDX	Foliage	Dicot	Leaf/Stem	Pigweed	Magnoliopsida	Caryophyllales	Amaranthaceae	Amaranthus	Amaranthus sp.	Iowa Army Am	5	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
245	RDX	RDX	Foliage	Dicot	Leaf/Stem	Goldenrod	Magnoliopsida	Asterales	Asteraceae	Solidago	Solidago canadensis	Iowa Army Am	18	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
246	RDX	RDX	Foliage	Dicot	Leaf/Stem	Goldenrod	Magnoliopsida	Asterales	Asteraceae	Solidago	Solidago canadensis	Iowa Army Am	19-2	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
247	RDX	RDX	Foliage	Dicot	Leaf/Stem	Black Locust	Magnoliopsida	Fabales	Fabaceae	Robinia	Robinia pseudo-acacia	Iowa Army Am	20	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
248	RDX	RDX	Foliage	Dicot	Leaf/Stem	Ragweed	Magnoliopsida	Asterales	Asteraceae	Ambrosia	Ambrosia artemisiifolia	Iowa Army Am	21	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
249	RDX	RDX	Foliage	Dicot	Leaf/Stem	Smartweed	Magnoliopsida	Polygonales	Poliganaceae	Polygonum	Polygonum sp.	Iowa Army Am	104	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
250	RDX	RDX	Foliage	Dicot	Leaf/Stem	Pigweed	Magnoliopsida	Caryophyllales	Amaranthaceae	Amaranthus	Amaranthus sp.	Iowa Army Am	106	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
251	RDX	RDX	Foliage	Dicot	Leaf/Stem	Ragweed	Magnoliopsida	Asterales	Asteraceae	Ambrosia	Ambrosia artemisiifolia	Iowa Army Am	108	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
252	RDX	RDX	Foliage	Dicot	Leaf/Stem	Goldenrod	Magnoliopsida	Asterales	Asteraceae	Solidago	Solidago canadensis	Iowa Army Am	109	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
253	RDX	RDX	Foliage	Dicot	Leaf/Stem	Black Locust	Magnoliopsida	Fabales	Fabaceae	Robinia	Robinia pseudo-acacia	Iowa Army Am	111	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
254	RDX	RDX	Foliage	Dicot	Leaf/Stem	Common Milkweed	Magnoliopsida	Gentianales	Asclepiadaceae	Asciepias	Asclepias syriaca	Iowa Army Am	112-1	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
255	RDX	RDX	Foliage	Dicot	Leaf/Stem	Goldenrod	Magnoliopsida	Asterales	Asteraceae	Solidago	Solidago canadensis	Iowa Army Am	112-2	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
256	RDX	RDX	Foliage	Dicot	Leaf/Stem	Sunflower	Magnoliopsida	Asterales	Asteraceae	Helianthus	Helianthus nutallii	Iowa Army Am	112-3	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
257	RDX	RDX	Foliage	Gymnosperm	Leaf/Stem	Red Cedar	Pinopsida	Pinales	Cupressaceae	Juniperus	Juniperus viginiana	Iowa Army Am	113	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
258	RDX	RDX	Foliage	Monocot	Shoot	Japanese Millet	Liliopsida	Cyperales	Poaceae	Echinochloa	Echinochloa esculenta	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
259	RDX	RDX	Foliage	Monocot	Shoot	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	Lolium perenne	Lab	--	Lab	19	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
260	RDX	RDX	Foliage	Monocot	Shoot	Japanese Millet	Liliopsida	Cyperales	Poaceae	Echinochloa	Echinochloa esculenta	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
261	RDX	RDX	Foliage	Monocot	Shoot	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	Lolium perenne	Lab	--	Lab	19	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
262	RDX	RDX	Foliage	Monocot	Shoot	Japanese Millet	Liliopsida	Cyperales	Poaceae	Echinochloa	Echinochloa esculenta	Lab	--	Lab	42	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
263	RDX	RDX	Foliage	Monocot	Shoot	Japanese Millet	Liliopsida	Cyperales	Poaceae	Echinochloa	Echinochloa esculenta	Lab	--	Lab	42	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
264	RDX	RDX	Foliage	Monocot	Shoot	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	Lolium perenne	Lab	--	Lab	42	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
265	RDX	RDX	Foliage	Monocot	Shoot	Perennial Ryegrass	Liliopsida	Cyperales	Poaceae	Lolium	Lolium perenne	Lab	--	Lab	42	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
266	RDX	RDX	Foliage	Monocot	Shoot	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	Cyperus esculentus L	Lab	S1W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
267	RDX	RDX	Foliage	Monocot	Stalk, leaves,	Corn	Liliopsida	Cyperales	Poaceae	Zea	Zea mays	Lab	S1W0	Lab	76-80	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
268	RDX	RDX	Foliage	Monocot	Shoot	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	Cyperus esculentus L	Lab	S2W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
269	RDX	RDX	Foliage	Monocot	Shoot	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	Cyperus esculentus L	Lab	S3W0	Lab	45	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
270	RDX	RDX	Foliage	Monocot	Stalk, leaves,	Corn	Liliopsida	Cyperales	Poaceae	Zea	Zea mays	Lab	S3W0	Lab	76-80	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
271	RDX	RDX	Foliage	Monocot	Leaf/Stem	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	Bromus inermis	Iowa Army Am	4	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix A-1. Plant Bioaccumulation (Uptake) Database

Record NO	Soil Conc	Soil Qualifier	Soil Units	Soil Measured Conc	soil_wet_dry?	Water Conc	Water Units	Water Qualifier	Tissue Conc	Tissue Qualifier	Tissue Units	Reported BAF	N	Reference	Notes:
	Results														
181	591.494	Det	mg/kg-dw	M	dry-weight	--	--	--	140	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 197/Biotic Moisture: %/Det Freq of the Abiotic Medium: 5/5
182	591.494	Det	mg/kg-dw	M	dry-weight	--	--	--	510	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 198/Biotic Moisture: %/Det Freq of the Abiotic Medium: 5/5
183	591.494	Det	mg/kg-dw	M	dry-weight	--	--	--	470	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 199/Biotic Moisture: %/Det Freq of the Abiotic Medium: 5/5
184	591.494	Det	mg/kg-dw	M	dry-weight	--	--	--	530	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 203/Biotic Moisture: %/Det Freq of the Abiotic Medium: 5/5
185	591.494	Det	mg/kg-dw	M	dry-weight	--	--	--	410	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 204/Biotic Moisture: %/Det Freq of the Abiotic Medium: 5/5
186	591.494	Det	mg/kg-dw	M	dry-weight	--	--	--	460	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 205/Biotic Moisture: %/Det Freq of the Abiotic Medium: 5/5
187	0.469	Det	mg/kg-dw	M	dry-weight	--	--	--	7.8	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 319/Biotic Moisture: 69%/Det Freq of the Abiotic Medium: 4/5
188	0.469	Det	mg/kg-dw	M	dry-weight	--	--	--	16	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 320/Biotic Moisture: 70%/Det Freq of the Abiotic Medium: 4/5
189	0.469	Det	mg/kg-dw	M	dry-weight	--	--	--	9.4	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 321/Biotic Moisture: 70%/Det Freq of the Abiotic Medium: 4/5
190	0.469	Det	mg/kg-dw	M	dry-weight	--	--	--	16	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 322/Biotic Moisture: 73%/Det Freq of the Abiotic Medium: 4/5
191	0.469	Det	mg/kg-dw	M	dry-weight	--	--	--	22	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 323/Biotic Moisture: 74%/Det Freq of the Abiotic Medium: 4/5
192	0.40265385	Det	mg/kg-dw	M	dry-weight	--	--	--	2	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 499/Biotic Moisture: 79%/Det Freq of the Abiotic Medium: 9/13
193	0.40265385	Det	mg/kg-dw	M	dry-weight	--	--	--	2.5	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 503/Biotic Moisture: 73%/Det Freq of the Abiotic Medium: 9/13
194	0.40265385	Det	mg/kg-dw	M	dry-weight	--	--	--	3.4	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 504/Biotic Moisture: 73%/Det Freq of the Abiotic Medium: 9/13
195	0.40265385	Det	mg/kg-dw	M	dry-weight	--	--	--	4.2	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 505/Biotic Moisture: 63%/Det Freq of the Abiotic Medium: 9/13
196	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	5.7	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 253/Biotic Moisture: 87%/Det Freq of the Abiotic Medium: 4/5
197	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	7.3	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 254/Biotic Moisture: 86%/Det Freq of the Abiotic Medium: 4/5
198	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	18	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 255/Biotic Moisture: 88%/Det Freq of the Abiotic Medium: 4/5
199	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	22	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 256/Biotic Moisture: 86%/Det Freq of the Abiotic Medium: 4/5
200	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	20	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 257/Biotic Moisture: 90%/Det Freq of the Abiotic Medium: 4/5
201	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	200	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 258/Biotic Moisture: 55%/Det Freq of the Abiotic Medium: 4/5
202	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	27	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 259/Biotic Moisture: 69%/Det Freq of the Abiotic Medium: 4/5
203	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	120	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 260/Biotic Moisture: 69%/Det Freq of the Abiotic Medium: 4/5
204	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	110	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 261/Biotic Moisture: 75%/Det Freq of the Abiotic Medium: 4/5
205	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	190	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 262/Biotic Moisture: 73%/Det Freq of the Abiotic Medium: 4/5
206	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	310	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 263/Biotic Moisture: 68%/Det Freq of the Abiotic Medium: 4/5
207	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	180	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 264/Biotic Moisture: 69%/Det Freq of the Abiotic Medium: 4/5
208	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	240	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 265/Biotic Moisture: 68%/Det Freq of the Abiotic Medium: 4/5
209	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	220	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 266/Biotic Moisture: 76%/Det Freq of the Abiotic Medium: 4/5
210	42.3681	Det	mg/kg-dw	M	dry-weight	--	--	--	200	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 267/Biotic Moisture: 70%/Det Freq of the Abiotic Medium: 4/5
211	0.469	Det	mg/kg-dw	M	dry-weight	--	--	--	4.4	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 324/Biotic Moisture: 86%/Det Freq of the Abiotic Medium: 4/5
212	0.469	Det	mg/kg-dw	M	dry-weight	--	--	--	13	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 325/Biotic Moisture: 85%/Det Freq of the Abiotic Medium: 4/5
213	0.469	Det	mg/kg-dw	M	dry-weight	--	--	--	4.3	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 326/Biotic Moisture: 88%/Det Freq of the Abiotic Medium: 4/5
214	0.469	Det	mg/kg-dw	M	dry-weight	--	--	--	13	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 327/Biotic Moisture: 85%/Det Freq of the Abiotic Medium: 4/5
215	3.818	Det	mg/kg-dw	M	dry-weight	--	--	--	350	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 347/Biotic Moisture: %/Det Freq of the Abiotic Medium: 9/9
216	3.818	Det	mg/kg-dw	M	dry-weight	--	--	--	79	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 348/Biotic Moisture: %/Det Freq of the Abiotic Medium: 9/9
217	3.818	Det	mg/kg-dw	M	dry-weight	--	--	--	31	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 349/Biotic Moisture: %/Det Freq of the Abiotic Medium: 9/9
218	3.818	Det	mg/kg-dw	M	dry-weight	--	--	--	160	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 350/Biotic Moisture: %/Det Freq of the Abiotic Medium: 9/9
219	3.818	Det	mg/kg-dw	M	dry-weight	--	--	--	360	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 351/Biotic Moisture: %/Det Freq of the Abiotic Medium: 9/9
220	3.818	Det	mg/kg-dw	M	dry-weight	--	--	--	370	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 352/Biotic Moisture: %/Det Freq of the Abiotic Medium: 9/9
221	3.818	Det	mg/kg-dw	M	dry-weight	--	--	--	140	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 353/Biotic Moisture: %/Det Freq of the Abiotic Medium: 9/9
222	3.818	Det	mg/kg-dw	M	dry-weight	--	--	--	64	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 354/Biotic Moisture: %/Det Freq of the Abiotic Medium: 9/9
223	3.818	Det	mg/kg-dw	M	dry-weight	--	--	--	220	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 355/Biotic Moisture: %/Det Freq of the Abiotic Medium: 9/9
224	0.4533	Det	mg/kg-dw	M	dry-weight	--	--	--	3.4	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 383/Biotic Moisture: 66%/Det Freq of the Abiotic Medium: 3/3
225	0.4533	Det	mg/kg-dw	M	dry-weight	--	--	--	3.4	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 384/Biotic Moisture: 70%/Det Freq of the Abiotic Medium: 3/3
226	0.4533	Det	mg/kg-dw	M	dry-weight	--	--	--	1.8	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 385/Biotic Moisture: 74%/Det Freq of the Abiotic Medium: 3/3
227	591.494	Det	mg/kg-dw	M	dry-weight	--	--	--	40	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 200/Biotic Moisture: %/Det Freq of the Abiotic Medium: 5/5
228	591.494	Det	mg/kg-dw	M	dry-weight	--	--	--	43	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 201/Biotic Moisture: %/Det Freq of the Abiotic Medium: 5/5
229	591.494	Det	mg/kg-dw	M	dry-weight	--	--	--	39	Det	mg/kg-dry	--	--	Parsons, 2001	Original Order from the datasheet: 202/Biotic Moisture: %/Det Freq of the Abiotic Medium: 5/5
230	10296	Det	mg/kg-dw	M	dry-weight	--	--	--	2610	Det	mg/kg-dry	0.27	4	Lachance et al. 2003	Source: Tbl 12/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
231	9543	Det	mg/kg-dw	M	dry-weight	--	--	--	6321	Det	mg/kg-dry	0.66	4	Lachance et al. 2003	Source: Tbl 13/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
232	87	Det	mg/kg-dw	M	dry-weight	--	--	--	6871	Det	mg/kg-dry	79	4	Lachance et al. 2003	Source: Tbl 17/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
233	998	Det	mg/kg-dw	M	dry-weight	--	--	--	6820	Det	mg/kg-dry	6.8	4	Lachance et al. 2003	Source: Tbl 17/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
234	7.675	Det	mg/kg-dw	M	dry-weight	--	--	--	3188.4	Det	mg/kg-dry	--	5	Price et al. 1997	--
235	0.673	Det	mg/kg-dw	M	dry-weight	--	--	--	163.6	Det	mg/kg-dry	--	5	Price et al. 1997	--
236	50.3	Det	mg/kg-dw	M	dry-weight	--	--	--	24265	Det	mg/kg-dry	--	5	Price et al. 1997	--
237	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	149.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 22.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
238	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	796	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 119.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
239	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	1444.7	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 216.7 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
240	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	88.2	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 19.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
241	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	445.9	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 98.1 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
242	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	849.5	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 186.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
243	2.5	Det	mg/kg-dw	M	--	--	--	--	51.2	Det	--	--	--	Schneider_et_al_1995	--
244	59.7	Det	mg/kg-dw	M	--	--	--	--	3.6	Det	--	--	--	Schneider_et_al_1995	--
245	57.1	Det	mg/kg-dw	M	--	--	--	--	35	Det	--	--	--	Schneider_et_al_1995	--
246	9	Det	mg/kg-dw	M	--	--	--	--	23.6	Det	--	--	--	Schneider_et_al_1995	--
247	114	Det	mg/kg-dw	M	--	--	--	--	38.6	Det	--	--	--	Schneider_et_al_1995	--
248	702	Det	mg/kg-dw	M	--	--	--	--	73.9	Det	--	--	--	Schneider_et_al_1995	--
249	3.2	Det	mg/kg-dw	M	--	--	--	--	5.03	Det	--	--	--	Schneider_et_al_1995	--
250	3.8	Det	mg/kg-dw	M	--	--	--	--	10.7	Det	--	--	--	Schneider_et_al_1995	--
251	166	Det	mg/kg-dw	M	--	--	--	--	33.4	Det	--	--	--	Schneider_et_al_1995	--
252	1100	Det	mg/kg-dw	M	--	--	--	--	37.9	Det	--	--	--	Schneider_et_al_1995	--
253	1.6	Det	mg/kg-dw	M	--	--	--	--	17.2	Det	--	--	--	Schneider_et_al_1995	--
254	46.1	Det	mg/kg-dw	M	--	--	--	--	88.6	Det	--	--	--	Schneider_et_al_1995	--
255	46.1	Det	mg/kg-dw	M	--	--	--	--	5.64	Det	--	--	--	Schneider_et_al_1995	--
256	46.1	Det	mg/kg-dw	M	--	--	--	--	8.61	Det	--	--	--	Schneider_et_al_1995	--
257	16.8	Det	mg/kg-dw	M	--	--	--	--	42	Det	--	--	--	Schneider_et_al_1995	--
258	10244	Det	mg/kg-dw	M	dry-weight	--	--	--	1658	Det	mg/kg-dry	0.17	4	Lachance et al. 2003	Source: Tbl 12/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
259	9373	Det	mg/kg-dw	M	dry-weight	--	--	--	1330	Det	mg/kg-dry	0.14	4	Lachance et al. 2003	Source: Tbl 12/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
260	9148	Det	mg/kg-dw	M	dry-weight	--	--	--	5047	Det	mg/kg-dry	0.53	4	Lachance et al. 2003	Source: Tbl 13/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
261	9532	Det	mg/kg-dw	M	dry-weight	--	--	--	3748	Det	mg/kg-dry	0.39	4	Lachance et al. 2003	Source: Tbl 13/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
262	83	Det	mg/kg-dw	M	dry-weight	--	--	--	5802	Det	mg/kg-dry	70	4	Lachance et al. 2003	Source: Tbl 17/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
263	1011	Det	mg/kg-dw	M	dry-weight	--	--	--	5190	Det	mg/kg-dry	5.1	4	Lachance et al. 2003	Source: Tbl 17/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
264	93	Det	mg/kg-dw	M	dry-weight	--	--	--	4115	Det	mg/kg-dry	45	4	Lachance et al. 2003	Source: Tbl 17/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
265	946	Det	mg/kg-dw	M	dry-weight	--	--	--	3288	Det	mg/kg-dry	3.5	4	Lachance et al. 2003	Source: Tbl 17/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
266	7.675	Det	mg/kg-dw	M	dry-weight	--	--	--	34.9	Det	mg/kg-dry	--	5	Price et al. 1997	--
267	7.675	Det	mg/kg-dw	M	dry-weight	--	--	--	21	Det	mg/kg-dry	--	5	Price et al. 1997	--
268	0.673	Det	mg/kg-dw	M	dry-weight	--	--	--	5	Det	mg/kg-dry	--	5	Price et al. 1997	--
269	50.3	Det	mg/kg-dw	M	dry-weight	--	--	--	304.7	Det	mg/kg-dry	--	5	Price et al. 1997	--
270	50.3	Det	mg/kg-dw	M	dry-weight	--	--	--	164.7	Det	mg/kg-dry	--	5	Price et al. 1997	--
271	5010	Det	mg/kg-dw	M	--	--	--	--	72.1	Det	--	--	--	Schneider_et_al_1995	--

Appendix A-1. Plant Bioaccumulation (Uptake) Database

Record NO	Parent Analyte	Analyte in Tissue	Tissue	Monocot / Dicot	Tissue as Reported	Common Name	Class	Order	Family	Genus	Species	Location	Sub- location	Lab / Field	Duration	Duration Units	Soil Texture	EC	Soil_Ca	Soil_Mg	Nitrate	Bulk_Dens	Field_Capac	Tot_N%	K mg/kg	%Sand	%Silt	%Clay	p	pH	%OM	%OC	CEC
			Plant Species Characteristics									Experimental Condition						Soil Characteristics															
272	RDX	RDX	Foliage	Monocot	Leaf/Stem	Reed Canary Grass	Liliopsida	Cyperales	Poaceae	Phalaris	*Phalaris arundinacea*	Iowa Army Am	12	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
273	RDX	RDX	Foliage	Monocot	Leaf/Stem	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Iowa Army Am	105	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
274	RDX	RDX	Fruit	Dicot	Fruit	Tomato	Magnoliopsida	Scrophulariale	Solanaceae	Lycopersicon	*Lycopersicon esculentum*	Lab	S1W0	Lab	50-85	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
275	RDX	RDX	Fruit	Dicot	Fruit	Tomato	Magnoliopsida	Scrophulariale	Solanaceae	Lycopersicon	*Lycopersicon esculentum*	Lab	S3W0	Lab	50-85	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
276	RDX	RDX	Fruit	Dicot	Pod	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
277	RDX	RDX	Fruit	Dicot	Pod	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
278	RDX	RDX	Fruit	Dicot	Pod	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
279	RDX	RDX	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
280	RDX	RDX	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
281	RDX	RDX	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
282	RDX	RDX	Root	Dicot	Root	Arrowhead	Magnoliopsida	Alsmatales	Alismataceae	Saggitaria	*Saggitaria calycina*	Iowa Army Am	8	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
283	RDX	RDX	Root	Dicot	Root	Goldenrod	Magnoliopsida	Asterales	Asteraceae	Solidago	*Solidago canadensis*	Iowa Army Am	18	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
284	RDX	RDX	Root	Dicot	Root	Ragweed	Magnoliopsida	Asterales	Asteraceae	Ambrosia	*Ambrosia artemisiifolia*	Iowa Army Am	21	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
285	RDX	RDX	Root	Dicot	Root	Smartweed	Magnoliopsida	Polygonales	Poliganaceae	Polygonum	*Polygonum sp.*	Iowa Army Am	104	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
286	RDX	RDX	Root	Dicot	Root	Pigweed	Magnoliopsida	Caryophyllale:	Amaranthacea	Amaranthus	*Amaranthus sp.*	Iowa Army Am	106	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
287	RDX	RDX	Root	Dicot	Root	Ragweed	Magnoliopsida	Asterales	Asteraceae	Ambrosia	*Ambrosia artemisiifolia*	Iowa Army Am	108	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
288	RDX	RDX	Root	Dicot	Root	Goldenrod	Magnoliopsida	Asterales	Asteraceae	Solidago	*Solidago canadensis*	Iowa Army Am	109	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
289	RDX	RDX	Root	Dicot	Root	Black Locust	Magnoliopsida	Fabales	Fabaceae	Robinia	*Robinia pseudo-acacia*	Iowa Army Am	111	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
290	RDX	RDX	Root	Dicot	Root	Common Milkweed	Magnoliopsida	Gentianales	Asclepiadacea	Asciepias	*Asclepias syriaca*	Iowa Army Am	112-1	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
291	RDX	RDX	Root	Dicot	Root	Sunflower	Magnoliopsida	Asterales	Asteraceae	Helianthus	*Helianthus nutallii*	Iowa Army Am	112-3	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
292	RDX	RDX	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Iowa Army Am	105	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
293	RDX	RDX	Seed	Dicot	Seed	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
294	RDX	RDX	Seed	Dicot	Seed	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
295	RDX	RDX	Seed	Dicot	Seed	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
296	RDX	RDX	Seed	Monocot	Seed	Corn	Liliopsida	Cyperales	Poaceae	Zea	*Zea mays*	Lab	S3W0	Lab	76-80	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
297	Tetryl	Tetryl	Foliage	Dicot	Leaf	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
298	Tetryl	Tetryl	Foliage	Dicot	Leaf	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
299	Tetryl	Tetryl	Foliage	Dicot	Leaf	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
300	Tetryl	Tetryl	Foliage	Dicot	Stem	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
301	Tetryl	Tetryl	Foliage	Dicot	Stem	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
302	Tetryl	Tetryl	Foliage	Dicot	Stem	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
303	Tetryl	Tetryl	Foliage	Monocot	Leaf	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
304	Tetryl	Tetryl	Foliage	Monocot	Leaf	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
305	Tetryl	Tetryl	Foliage	Monocot	Leaf	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
306	Tetryl	Tetryl	Foliage	Monocot	Leaf	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
307	Tetryl	Tetryl	Foliage	Monocot	Leaf	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
308	Tetryl	Tetryl	Foliage	Monocot	Leaf	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
309	Tetryl	Tetryl	Foliage	Monocot	Leaf	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
310	Tetryl	Tetryl	Foliage	Monocot	Leaf	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
311	Tetryl	Tetryl	Foliage	Monocot	Leaf	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
312	Tetryl	Tetryl	Foliage	Monocot	Leaf	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
313	Tetryl	Tetryl	Foliage	Monocot	Leaf	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
314	Tetryl	Tetryl	Foliage	Monocot	Leaf	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
315	Tetryl	Tetryl	Fruit	Dicot	Pod	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
316	Tetryl	Tetryl	Fruit	Dicot	Pod	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
317	Tetryl	Tetryl	Fruit	Dicot	Pod	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
318	Tetryl	Tetryl	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
319	Tetryl	Tetryl	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
320	Tetryl	Tetryl	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
321	Tetryl	Tetryl	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
322	Tetryl	Tetryl	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
323	Tetryl	Tetryl	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
324	Tetryl	Tetryl	Root	Monocot	Root	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
325	Tetryl	Tetryl	Root	Monocot	Root	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
326	Tetryl	Tetryl	Root	Monocot	Root	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
327	Tetryl	Tetryl	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
328	Tetryl	Tetryl	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
329	Tetryl	Tetryl	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
330	Tetryl	Tetryl	Root	Monocot	Root	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
331	Tetryl	Tetryl	Root	Monocot	Root	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
332	Tetryl	Tetryl	Root	Monocot	Root	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
333	Tetryl	Tetryl	Seed	Dicot	Seed	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
334	Tetryl	Tetryl	Seed	Dicot	Seed	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
335	Tetryl	Tetryl	Seed	Dicot	Seed	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
336	Tetryl	Tetryl	Seed	Monocot	Seed	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
337	Tetryl	Tetryl	Seed	Monocot	Seed	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
338	Tetryl	Tetryl	Seed	Monocot	Seed	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
339	Tetryl	Tetryl	Seed	Monocot	Seed	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
340	Tetryl	Tetryl	Seed	Monocot	Seed	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
341	Tetryl	Tetryl	Seed	Monocot	Seed	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
342	Tetryl	Tetryl	Seed	Monocot	Seed	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
343	Tetryl	Tetryl	Seed	Monocot	Seed	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
344	TNB	TNB	Foliage	Dicot	Shoot	Alfalfa	Magnoliopsida	Fabales	Fabaceae	Medicago	*Medicago sativa*	Lab	--	Lab	16	Days	Sandy loam	--	--	--	--	--	--	--	--	71	18	11	--	5	--	1.3	4.27
345	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
346	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
347	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
348	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
349	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
350	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
351	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
352	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
353	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
354	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
355	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
356	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
357	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
358	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
359	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
360	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
361	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
362	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34

	Results														
Record NO	Soil Conc	Soil Qualifier	Soil Units	Soil Measured Conc	soil_wet_dry?	Water Conc	Water Units	Water Qualifier	Tissue Conc	Tissue Qualifier	Tissue Units	Reported BAF	N	Reference	Notes:
272	19.4	Det	mg/kg-dw	M	--	--	--	--	10.1	Det	--	--	--	Schneider_et_al_1995	--
273	1800	Det	mg/kg-dw	M	--	--	--	--	41.5	Det	--	--	--	Schneider_et_al_1995	--
274	7.675	Det	mg/kg-dw	M	dry-weight	--	--	--	77.1	Det	mg/kg-dry	--	5	Price et al. 1997	--
275	50.3	Det	mg/kg-dw	M	dry-weight	--	--	--	104.3	Det	mg/kg-dry	--	5	Price et al. 1997	--
276	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	47.7	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 10.5 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
277	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	151.8	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 33.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
278	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	202.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 44.5 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
279	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	28.9	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 8.1 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
280	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	175.4	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 49.1 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
281	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	267.9	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 75 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
282	1160	Det	mg/kg-dw	M	--	--	--	--	7.4	Det	--	--	--	Schneider_et_al_1995	--
283	57.1	Det	mg/kg-dw	M	--	--	--	--	904	Det	--	--	--	Schneider_et_al_1995	--
284	702	Det	mg/kg-dw	M	--	--	--	--	31.5	Det	--	--	--	Schneider_et_al_1995	--
285	3.2	Det	mg/kg-dw	M	--	--	--	--	4.09	Det	--	--	--	Schneider_et_al_1995	--
286	3.8	Det	mg/kg-dw	M	--	--	--	--	20.2	Det	--	--	--	Schneider_et_al_1995	--
287	166	Det	mg/kg-dw	M	--	--	--	--	17.7	Det	--	--	--	Schneider_et_al_1995	--
288	1100	Det	mg/kg-dw	M	--	--	--	--	2.3	Det	--	--	--	Schneider_et_al_1995	--
289	1.6	Det	mg/kg-dw	M	--	--	--	--	5.77	Det	--	--	--	Schneider_et_al_1995	--
290	46.1	Det	mg/kg-dw	M	--	--	--	--	8.2	Det	--	--	--	Schneider_et_al_1995	--
291	46.1	Det	mg/kg-dw	M	--	--	--	--	4.28	Det	--	--	--	Schneider_et_al_1995	--
292	1800	Det	mg/kg-dw	M	--	--	--	--	15.8	Det	--	--	--	Schneider_et_al_1995	--
293	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	43.6	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 39.5 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
294	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	331.6	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 300.8 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
295	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	664.4	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 602.6 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
296	50.3	Det	mg/kg-dw	M	dry-weight	--	--	--	18.1	Det	mg/kg-dry	--	5	Price et al. 1997	--
297	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	9.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 1.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
298	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	20	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 3 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
299	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	63.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 9.5 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
300	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	10.9	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 2.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
301	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	20.5	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 4.5 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
302	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	41.4	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 9.1 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
303	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	16	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 2.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
304	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	71.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 10.7 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
305	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	193.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 29 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
306	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	17.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 2.6 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
307	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	97.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 14.6 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
308	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	229.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 34.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
309	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	504.7	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 75.7 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
310	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	2818	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 422.7 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
311	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	3666	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 549.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
312	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	292	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 43.8 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
313	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	3029.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 454.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
314	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	3763.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 564.5 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
315	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	1.8	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
316	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	1.8	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
317	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	3.2	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.7 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
318	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	93.6	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 26.2 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
319	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	233.2	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 65.3 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
320	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	452.1	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 126.6 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
321	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	31.8	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 8.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
322	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	168.9	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 47.3 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
323	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	211.4	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 59.2 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
324	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	18.6	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 5.2 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
325	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	111.4	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 31.2 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
326	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	279.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 78.2 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
327	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	63.9	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 17.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
328	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	161.1	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 45.1 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
329	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	143.2	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 40.1 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
330	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	142.9	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 40 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
331	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	921.1	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 257.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
332	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	1132.5	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 317.1 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
333	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	0.6	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.5 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
334	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	0.6	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.5 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
335	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	1.1	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 1 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
336	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	0.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.3 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
337	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	0.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.3 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
338	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	0.4	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
339	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	2	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 1.8 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
340	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	3.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 3 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
341	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	8.4	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 7.6 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
342	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	24	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 21.8 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
343	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	30.8	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 27.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
344	19.6	Det	mg/kg-dw	M	dry-weight	--	--	--	20	Det	mg/kg-dry	0.3	4	Lachance et al. 2003	Source: Tbl 6/ Authors note that uptake is not dependent on plant species/ lower water solubility gives lower uptaken potential / Reported BCFs were taken from soil conc at T.inital, not T.final/ soil conc entered here are at Tfinal as this is a more realistic field condition.
345	70	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
346	0.57	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.4	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
347	0.49	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
348	0.54	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
349	0.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.1	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
350	73	Det	mg/kg-dw	M	presume dry-weight	--	--	--	3.1	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
351	0.57	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
352	33	Det	mg/kg-dw	M	presume dry-weight	--	--	--	3.8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
353	17	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.64	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
354	0.71	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.71	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
355	0.71	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.87	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
356	41	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
357	0.66	Det	mg/kg-dw	M	presume dry-weight	--	--	--	5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
358	2.6	Det	mg/kg-dw	M	presume dry-weight	--	--	--	5.5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
359	0.47	Det	mg/kg-dw	M	presume dry-weight	--	--	--	4.5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
360	0.64	Det	mg/kg-dw	M	presume dry-weight	--	--	--	4.1	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
361	5.1	Det	mg/kg-dw	M	presume dry-weight	--	--	--	4.3	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
362	0.27	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.2	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4

Appendix A-1. Plant Bioaccumulation (Uptake) Database

Record NO	Parent Analyte	Analyte in Tissue	Tissue	Monocot / Dicot	Tissue as Reported	Common Name	Class	Order	Family	Genus	Species	Location	Sub- location	Lab / Field	Duration	Duration Units	Soil Texture	EC	Soil_Ca	Soil_Mg	Nitrate	Bulk_Dens	Field_Capac	Tot_N%	K mg/kg	%Sand	%Silt	%Clay	p	pH	%OM	%OC	CEC
						Plant Species Characteristics						Experimental Condition					Soil Characteristics																
363	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
364	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
365	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
366	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
367	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
368	TNT	2ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
369	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
370	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
371	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
372	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
373	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
374	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
375	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
376	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
377	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
378	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
379	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
380	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
381	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
382	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
383	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
384	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
385	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
386	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
387	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
388	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
389	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
390	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
391	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
392	TNT	4ADNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
393	TNT	TNT	Foliage	Dicot	Leaf	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
394	TNT	TNT	Foliage	Dicot	Leaf	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
395	TNT	TNT	Foliage	Dicot	Leaf	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
396	TNT	TNT	Foliage	Dicot	Stem	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
397	TNT	TNT	Foliage	Dicot	Stem	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
398	TNT	TNT	Foliage	Dicot	Stem	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
399	TNT	TNT	Foliage	Dicot	Leaf/Stem	Black Locust	Magnoliopsida	Fabales	Fabaceae	Robinia	*Robinia pseudo-acacia*	Iowa Army Am	20	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
400	TNT	TNT	Foliage	Monocot	Stalk, leaves,	Corn	Liliopsida	Cyperales	Poaceae	Zea	*Zea mays*	Lab	S1W0	Lab	76-80	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
401	TNT	TNT	Foliage	Monocot	Stalk, leaves,	Corn	Liliopsida	Cyperales	Poaceae	Zea	*Zea mays*	Lab	S3W0	Lab	76-80	Days	--	--	2505	720.5	1339	--	--	28.5	5.14	31.5	46.6	21.9	429	5.65	--	--	--
402	TNT	TNT	Foliage	Monocot	Leaf	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
403	TNT	TNT	Foliage	Monocot	Leaf	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
404	TNT	TNT	Foliage	Monocot	Leaf	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
405	TNT	TNT	Foliage	Monocot	Leaf	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
406	TNT	TNT	Foliage	Monocot	Leaf	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
407	TNT	TNT	Foliage	Monocot	Leaf	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
408	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
409	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
410	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
411	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
412	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
413	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
414	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
415	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6.27	14.3	--	10
416	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
417	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
418	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
419	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
420	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
421	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
422	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
423	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Silt	--	--	--	--	--	--	--	--	20	67.5	12.5	--	7.82	5.66	--	3.48
424	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
425	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
426	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
427	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
428	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
429	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
430	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
431	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	4.81	4.12	--	2.34
432	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	5	14.3	--	10
433	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	7	14.3	--	10
434	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	5	14.3	--	10
435	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6	14.3	--	10
436	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	7	14.3	--	10
437	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	5	4.12	--	2.34
438	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	WRS (reference	--	--	--	--	--	--	--	--	19.4	69.4	11.2	--	6	4.12	--	2.34
439	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	5	14.3	--	10
440	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	5	14.3	--	10
441	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	5	14.3	--	10
442	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6	14.3	--	10
443	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6	14.3	--	10
444	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6	14.3	--	10
445	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	6	14.3	--	10
446	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	7	14.3	--	10
447	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	7	14.3	--	10
448	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	7	14.3	--	10
449	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	8	14.3	--	10
450	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	8	14.3	--	10
451	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	8	14.3	--	10
452	TNT	TNT	Foliage	Monocot	Leaf	Yellow Nutsedge	Liliopsida	Cyperales	Cyperaceae	Cyperus	*Cyperus esculentus L*	Lab	--	Lab	45	Days	Clay	--	--	--	--	--	--	--	--	8	37	54.2	--	8	14.3	--	10
453	TNT	TNT	Foliage	Monocot	Leaf/Stem	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Iowa Army Am	105	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix A-1. Plant Bioaccumulation (Uptake) Database

Record NO	Soil Conc	Soil Qualifier	Soil Units	Soil Measured Conc	soil_wet_dry?	Water Conc	Water Units	Water Qualifier	Tissue Conc	Tissue Qualifier	Tissue Units	Reported BAF	N	Reference	Notes:
	Results														
363	47	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
364	0.77	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.3	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
365	0.62	Det	mg/kg-dw	M	presume dry-weight	--	--	--	18	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
366	2.4	Det	mg/kg-dw	M	presume dry-weight	--	--	--	12	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
367	34	Det	mg/kg-dw	M	presume dry-weight	--	--	--	9.5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
368	99	Det	mg/kg-dw	M	presume dry-weight	--	--	--	11	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
369	70	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
370	0.57	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
371	0.49	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
372	0.54	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
373	0.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
374	73	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
375	0.57	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.5	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
376	33	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.4	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
377	17	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.64	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
378	0.71	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.71	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
379	0.71	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.87	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
380	41	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.71	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
381	0.66	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.1	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
382	2.6	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.1	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
383	0.47	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
384	0.64	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
385	5.1	Det	mg/kg-dw	M	presume dry-weight	--	--	--	3.2	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
386	0.27	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.77	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
387	47	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
388	0.77	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
389	0.62	Det	mg/kg-dw	M	presume dry-weight	--	--	--	3.3	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
390	2.4	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.6	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
391	34	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
392	99	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
393	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	2	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.3 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
394	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	45.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 6.8 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
395	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	59.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 8.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
396	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	4.1	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
397	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	41.4	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 9.1 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
398	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	108.6	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 23.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
399	13.8	Det	mg/kg-dw	M	--	--	--	--	4.4	Det	--	--	--	Schneider_et_al_1995	--
400	17.05	Det	mg/kg-dw	M	dry-weight	--	--	--	11.6	Det	mg/kg-dry	--	5	Price et al. 1997	--
401	213	Det	mg/kg-dw	M	dry-weight	--	--	--	4.2	Det	mg/kg-dry	--	5	Price et al. 1997	--
402	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	4	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.6 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
403	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	61.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 9.2 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
404	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	360	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 54 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
405	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	5.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.8 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
406	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	63.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 9.5 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
407	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	435.3	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 65.3 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 85
408	70	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
409	0.57	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
410	0.49	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
411	0.54	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
412	0.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.9	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
413	73	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
414	0.57	Det	mg/kg-dw	M	presume dry-weight	--	--	--	3.2	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
415	33	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.7	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
416	17	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.64	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
417	0.71	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.71	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
418	0.71	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.87	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
419	41	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.71	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
420	0.66	Det	mg/kg-dw	M	presume dry-weight	--	--	--	1.9	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
421	2.6	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.3	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
422	0.47	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.9	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
423	0.64	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.4	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
424	5.1	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
425	0.27	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.77	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
426	47	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.8	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
427	0.77	Det	mg/kg-dw	M	presume dry-weight	--	--	--	0.83	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 20 mg/kg TNT were added to the soil / From tbl A3 & A4
428	0.62	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.9	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
429	2.4	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.9	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
430	34	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.4	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
431	99	Det	mg/kg-dw	M	presume dry-weight	--	--	--	2.2	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	Plant tissue conc probably is in wet wet conc, soil is oven-dry weight, 40 mg/kg TNT were added to the soil / From tbl A3 & A4
432	3.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	29	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 100ug/g
433	3.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	25	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 100ug/g
434	3.8	Det	mg/kg-dw	M	presume dry-weight	--	--	--	26	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
435	2.4	Det	mg/kg-dw	M	presume dry-weight	--	--	--	17	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
436	3.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	41	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
437	2.9	Det	mg/kg-dw	M	presume dry-weight	--	--	--	200	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
438	6.8	Det	mg/kg-dw	M	presume dry-weight	--	--	--	24	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 200ug/g
439	7.1	Det	mg/kg-dw	M	presume dry-weight	--	--	--	38	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
440	7.5	Det	mg/kg-dw	M	presume dry-weight	--	--	--	25	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
441	7.5	Det	mg/kg-dw	M	presume dry-weight	--	--	--	110	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
442	7.2	Det	mg/kg-dw	M	presume dry-weight	--	--	--	28	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
443	6	Det	mg/kg-dw	M	presume dry-weight	--	--	--	20	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
444	8.4	Det	mg/kg-dw	M	presume dry-weight	--	--	--	22	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
445	6.7	Det	mg/kg-dw	M	presume dry-weight	--	--	--	33	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
446	4.2	Det	mg/kg-dw	M	presume dry-weight	--	--	--	18	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
447	4	Det	mg/kg-dw	M	presume dry-weight	--	--	--	22	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
448	5.3	Det	mg/kg-dw	M	presume dry-weight	--	--	--	34	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
449	3.9	Det	mg/kg-dw	M	presume dry-weight	--	--	--	28	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
450	4.8	Det	mg/kg-dw	M	presume dry-weight	--	--	--	43	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
451	3.9	Det	mg/kg-dw	M	presume dry-weight	--	--	--	26	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
452	4.4	Det	mg/kg-dw	M	presume dry-weight	--	--	--	35	Det	presume mg/kg-dry	--	--	Folsom et al. 1988	From tbl A7 & A9 / TNT added to soil: 400ug/g
453	11000	Det	mg/kg-dw	M	--	--	--	--	0.76	Det	--	--	--	Schneider_et_al_1995	--

Appendix A-1. Plant Bioaccumulation (Uptake) Database

Record NO	Parent Analyte	Analyte in Tissue	Tissue	Monocot / Dicot	Tissue as Reported	Common Name	Class	Order	Family	Genus	Species	Location	Sub- location	Lab / Field	Duration	Duration Units	Soil Texture	EC	Soil_Ca	Soil_Mg	Nitrate	Bulk_Dens	Field_Capac	Tot_N%	K mg/kg	%Sand	%Silt	%Clay	p	pH	%OM	%OC	CEC
			Plant Species Characteristics									Experimental Condition						Soil Characteristics															
454	TNT	TNT	Fruit	Dicot	Pod	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
455	TNT	TNT	Fruit	Dicot	Pod	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
456	TNT	TNT	Fruit	Dicot	Pod	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
457	TNT	TNT	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
458	TNT	TNT	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
459	TNT	TNT	Root	Dicot	Root	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
460	TNT	TNT	Root	Dicot	Root	Common Milkweed	Magnoliopsida	Gentianales	Asclepiadacea	Asciepias	*Asciepias syriaca*	Joliet Army Am	3	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
461	TNT	TNT	Root	Dicot	Root	Common Teasel	Magnoliopsida	Dipsacales	Dipsacaceae	Dipsacus	*Dipsacus sylvestris*	Joliet Army Am	6	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
462	TNT	TNT	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
463	TNT	TNT	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
464	TNT	TNT	Root	Monocot	Root	Wheat	Liliopsida	Cyperales	Poaceae	Triticum	*Triticum aestivum*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
465	TNT	TNT	Root	Monocot	Root	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
466	TNT	TNT	Root	Monocot	Root	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
467	TNT	TNT	Root	Monocot	Root	Bland Brome	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus hordeaceus*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
468	TNT	TNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	3	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
469	TNT	TNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	8	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
470	TNT	TNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	13	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
471	TNT	TNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	9	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
472	TNT	TNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	6	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
473	TNT	TNT	Root	Monocot	Root	Smooth Bromegrass	Liliopsida	Cyperales	Poaceae	Bromus	*Bromus inermis*	Joliet Army Am	12	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
474	TNT	TNT	Seed	Dicot	Seed	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Clay loam	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
475	TNT	TNT	Seed	Dicot	Seed	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Silt loam	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--
476	TNT	TNT	Seed	Dicot	Seed	Bush Bean	Magnoliopsida	Fabales	Fabaceae	Phaseolus	*Phaseolus vulgaris*	Lab	--	Lab	60	Days	Sandy loam	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--

Appendix A-1. Plant Bioaccumulation (Uptake) Database

Record NO	Results: Soil Conc	Soil Qualifier	Soil Units	Soil Measured Conc	soil_wet_dry?	Water Conc	Water Units	Water Qualifier	Tissue Conc	Tissue Qualifier	Tissue Units	Reported BAF	N	Reference	Notes:
454	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	0.5	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.1 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
455	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	3.2	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.7 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
456	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	2.7	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.6 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 78
457	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	17.1	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 4.8 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
458	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	126.4	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 35.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
459	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	371.4	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 104 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
460	1	Det	mg/kg-dw	M	--	--	--	--	0.6	Det	--	--	--	Zellmer et al. 1995	--
461	6260	Det	mg/kg-dw	M	--	--	--	--	0.15	Det	--	--	--	Zellmer et al. 1995	--
462	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	17.5	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 4.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
463	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	146.1	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 40.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
464	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	775	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 217 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
465	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	8.9	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 2.5 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
466	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	71.1	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 19.9 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
467	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	212.1	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 59.4 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 72
468	1	Det	mg/kg-dw	M	--	--	--	--	4.5	Det	--	--	--	Zellmer et al. 1995	--
469	278	Det	mg/kg-dw	M	--	--	--	--	0.29	Det	--	--	--	Zellmer et al. 1995	--
470	5340	Det	mg/kg-dw	M	--	--	--	--	0.86	Det	--	--	--	Zellmer et al. 1995	--
471	5840	Det	mg/kg-dw	M	--	--	--	--	5.85	Det	--	--	--	Zellmer et al. 1995	--
472	6260	Det	mg/kg-dw	M	--	--	--	--	2.33	Det	--	--	--	Zellmer et al. 1995	--
473	39350	Det	mg/kg-dw	M	--	--	--	--	3.85	Det	--	--	--	Zellmer et al. 1995	--
474	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	0.1	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.1 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
475	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	0.7	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.6 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3
476	10	Det	mg/kg-dw	Nominal	dry-weight	--	--	--	0.6	Det	mg/kg-dry	--	--	Cataldo et al. 1993	Source: Tbl 5, plant wet weight conc is 0.5 / Assumed %WC because plant concentrations are reported as wet weight basis / Authors noted uptake is dependent on soil type (sand > silt >> clay) and plant type / %WC Assumed is: 9.3

Appendix A-2

Earthworm Bioaccumulation (Uptake) Database

Appendix A-2. Soil Invertebrate Bioaccumulation (Uptake) Database

			Soil Invertebrate Species Characteristics								Results					
Record NO	Parent Analyte in Soil	Analyte in Soil Invertebrate	Trophic level	Tissue Type	Class	Order	Family	Genus	Species	Depurated?	Soil Conc	Soil Qualifier	Soil Units	Nominal / Measured	Tissue Conc	Tissue Unit
1	2,4-DANT	2,4-DANT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	32.4	Det	mg/kg-dw	M	165	mg/kg-dw
2	2,4-DANT	2,4-DANT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	2.17	Det	mg/kg-dw	M	5.02	mg/kg-dw
3	2,6-DANT	2,6-DANT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	44.5	Det	mg/kg-dw	M	140	mg/kg-dw
4	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Lumbricus	*Lumbricus terrestris*	No	12	Det	mg/kg-dw	M	0.140	mg/kg-dw
5	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Lumbricus	*Lumbricus terrestris*	No	61	Det	mg/kg-dw	M	2.25	mg/kg-dw
6	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	45.5	Det	mg/kg-dw	M	197	mg/kg-dw
7	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	64.9	Det	mg/kg-dw	M	296	mg/kg-dw
8	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	87.1	Det	mg/kg-dw	M	394	mg/kg-dw
9	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	109	Det	mg/kg-dw	M	591	mg/kg-dw
10	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	4.14	Det	mg/kg-dw	M	19.7	mg/kg-dw
11	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	7.69	Det	mg/kg-dw	M	39.4	mg/kg-dw
12	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	0.387	Det	mg/kg-dw	M	1.44	mg/kg-dw
13	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	1.31	Det	mg/kg-dw	M	4.39	mg/kg-dw
14	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	2.26	Det	mg/kg-dw	M	8.88	mg/kg-dw
15	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	4.68	Det	mg/kg-dw	M	19.9	mg/kg-dw
16	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	15.7	Det	mg/kg-dw	M	122	mg/kg-dw
17	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	16.1	Det	mg/kg-dw	M	157	mg/kg-dw
18	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	13	Det	mg/kg-dw	M	66.6	mg/kg-dw
19	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	15.2	Det	mg/kg-dw	M	104	mg/kg-dw
20	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	14.4	Det	mg/kg-dw	M	45.6	mg/kg-dw
21	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	50	Det	mg/kg-dw	M	37	mg/kg-dw
22	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	13	Det	mg/kg-dw	M	50.7	mg/kg-dw
23	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	11.1	Det	mg/kg-dw	M	21.6	mg/kg-dw
24	2-ADNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	4.60	Det	mg/kg-dw	M	136	mg/kg-dw
25	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Lumbricus	*Lumbricus terrestris*	No	12	Det	mg/kg-dw	M	0.150	mg/kg-dw
26	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Lumbricus	*Lumbricus terrestris*	No	91	Det	mg/kg-dw	M	1.95	mg/kg-dw
27	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	56.2	Det	mg/kg-dw	M	355	mg/kg-dw
28	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	70.4	Det	mg/kg-dw	M	414	mg/kg-dw
29	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	11	Det	mg/kg-dw	M	69	mg/kg-dw
30	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	15.6	Det	mg/kg-dw	M	96.6	mg/kg-dw
31	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	0.731	Det	mg/kg-dw	M	2.52	mg/kg-dw
32	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	2.09	Det	mg/kg-dw	M	6.58	mg/kg-dw
33	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	4.14	Det	mg/kg-dw	M	13.3	mg/kg-dw
34	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	8.75	Det	mg/kg-dw	M	30.5	mg/kg-dw
35	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	13.2	Det	mg/kg-dw	M	86.5	mg/kg-dw
36	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	14.7	Det	mg/kg-dw	M	113	mg/kg-dw
37	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	18.9	Det	mg/kg-dw	M	87.6	mg/kg-dw
38	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	21	Det	mg/kg-dw	M	104	mg/kg-dw
39	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	22.5	Det	mg/kg-dw	M	60.4	mg/kg-dw
40	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	15.3	Det	mg/kg-dw	M	121	mg/kg-dw
41	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Aporrectodea	*Aporrectodea rosea*	Yes	53	Det	mg/kg-dw	M	216	mg/kg-dw
42	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Aporrectodea	*Aporrectodea rosea*	Yes	18.2	Det	mg/kg-dw	M	25.3	mg/kg-dw
43	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	86	Det	mg/kg-dw	M	71.3	mg/kg-dw
44	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	22.8	Det	mg/kg-dw	M	51	mg/kg-dw
45	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	16.4	Det	mg/kg-dw	M	22.3	mg/kg-dw
46	4-ADNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	12.7	Det	mg/kg-dw	M	116	mg/kg-dw
47	HMX	HMX	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	9.00	Det	mg/kg-dw	M	9.00	mg/kg-dw
48	HMX	HMX	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	83	Det	mg/kg-dw	M	26	mg/kg-dw
49	HMX	HMX	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	400	Det	mg/kg-dw	N	37	mg/kg-dw
50	Perchlorate anion	Perchlorate anion	Detrivore	Whole-body	--	--	--	terrestrial	*terrestrial insect (misc).*	--	591	Det	mg/kg-dw	M	11.6	mg/kg-dw
51	Perchlorate anion	Perchlorate anion	Detrivore	Whole-body	--	--	--	terrestrial	*terrestrial insect (misc).*	--	42.4	Det	mg/kg-dw	M	12.4	mg/kg-dw
52	Perchlorate anion	Perchlorate anion	Detrivore	Whole-body	--	--	--	terrestrial	*terrestrial insect (misc).*	--	42.4	Det	mg/kg-dw	M	11.4	mg/kg-dw
53	Perchlorate anion	Perchlorate anion	Detrivore	Whole-body	--	--	--	terrestrial	*terrestrial insect (misc).*	--	3.82	Det	mg/kg-dw	M	32.3	mg/kg-dw
54	RDX	RDX	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	11	Det	mg/kg-dw	M	125	mg/kg-dw
55	RDX	RDX	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	99	Det	mg/kg-dw	M	283	mg/kg-dw
56	RDX	RDX	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	400	Det	mg/kg-dw	N	270	mg/kg-dw
57	RDX	RDX	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	100	Det	mg/kg-dw	N	240	mg/kg-dw
58	TNT	2,4-DANT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	1.36	Det	mg/kg-dw	M	5.02	mg/kg-dw
59	TNT	2,4-DANT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	2.73	Det	mg/kg-dw	M	0.836	mg/kg-dw
60	TNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	1.36	Det	mg/kg-dw	M	19.7	mg/kg-dw

Appendix A-2. Soil Invertebrate Bioaccumulation (Uptake) Database

Record NO	Study Location	Sub-Location	Lab / Field	Duration	Duration Units	Soil Texture	pH	OM%	CEC	Conductivity	Sulfate	%Clay	%Gravel	%Sand	%Silt	%TOC	Soil Ca	Reference
						Soil Characteristics												
1	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
2	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
3	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
4	--	--	Lab	>10	d	--	--	--	--	--	--	--	--	--	--	--	--	Johson et al. 1999
5	--	--	Lab	>10	d	--	--	--	--	--	--	--	--	--	--	--	--	Johson et al. 1999
6	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
7	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
8	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
9	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
10	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
11	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
12	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
13	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
14	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
15	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
16	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
17	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
18	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
19	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
20	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
21	Quebec, C	B5	Field	10	d	--	5.95	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
22	Quebec, C	C1	Field	10	d	--	6.81	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
23	Quebec, C	C2	Field	10	d	--	6.97	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
24	Quebec, C	C3	Field	10	d	--	7.03	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
25	--	--	Lab	>10	d	--	--	--	--	--	--	--	--	--	--	--	--	Johson et al. 1999
26	--	--	Lab	>10	d	--	--	--	--	--	--	--	--	--	--	--	--	Johson et al. 1999
27	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
28	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
29	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
30	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
31	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
32	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
33	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
34	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
35	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
36	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
37	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
38	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
39	Lab	--	lab	14	d	--	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
40	Quebec, C	A3	Field	10	d	--	6.81	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
41	Quebec, C	B2	Field	10	d	--	6.57	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
42	Quebec, C	B4	Field	10	d	--	6.4	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
43	Quebec, C	B5	Field	10	d	--	5.95	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
44	Quebec, C	C1	Field	10	d	--	6.81	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
45	Quebec, C	C2	Field	10	d	--	6.97	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
46	Quebec, C	C3	Field	10	d	--	7.03	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
47	--	--	Lab	14	d	Sandy loar	5	1.3	4.27	--	--	11	--	71	18	--	--	Lachance et al. 2003
48	--	--	Lab	14	d	Sandy loar	5	1.3	4.27	--	--	11	--	71	18	--	--	Lachance et al. 2003
49	--	--	Lab	14	d	Sandy loar	5	1.3	4.27	--	--	11	--	71	18	--	--	Lachance et al. 2003
50	Mead Area	1	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	Parsons, 2001
51	Mead Area	3	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	Parsons, 2001
52	Mead Area	3	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	Parsons, 2001
53	ABL	1	Field	resident	--	--	--	--	--	--	--	--	--	--	--	--	--	Parsons, 2001
54	--	--	Lab	14	d	Sandy loar	5	1.3	4.27	--	--	11	--	71	18	--	--	Lachance et al. 2003
55	--	--	Lab	14	d	Sandy loar	5	1.3	4.27	--	--	11	--	71	18	--	--	Lachance et al. 2003
56	--	--	Lab	14	d	Sandy loar	5	1.3	4.27	--	--	11	--	71	18	--	--	Lachance et al. 2003
57	--	--	Lab	14	d	Sandy loar	5	1.3	4.27	--	--	11	--	71	18	--	--	Lachance et al. 2003
58	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
59	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
60	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004

Appendix A-2. Soil Invertebrate Bioaccumulation (Uptake) Database

			Soil Invertebrate Species Characteristics								Results					
Record NO	Parent Analyte in Soil	Analyte in Soil Invertebrate	Trophic level	Tissue Type	Class	Order	Family	Genus	Species	Depurated?	Soil Conc	Soil Qualifier	Soil Units	Nominal / Measured	Tissue Conc	Tissue Unit
61	TNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	2.73	Det	mg/kg-dw	M	39.4	mg/kg-dw
62	TNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	4.50	Det	mg/kg-dw	M	1.44	mg/kg-dw
63	TNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	10	Det	mg/kg-dw	M	4.39	mg/kg-dw
64	TNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	23	Det	mg/kg-dw	M	8.88	mg/kg-dw
65	TNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	45	Det	mg/kg-dw	M	19.9	mg/kg-dw
66	TNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	99	Det	mg/kg-dw	M	122	mg/kg-dw
67	TNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	110	Det	mg/kg-dw	M	157	mg/kg-dw
68	TNT	2-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	135	Det	mg/kg-dw	M	66.6	mg/kg-dw
69	TNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	1.36	Det	mg/kg-dw	M	69	mg/kg-dw
70	TNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes (24 hr)	2.73	Det	mg/kg-dw	M	96.6	mg/kg-dw
71	TNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	4.50	Det	mg/kg-dw	M	2.52	mg/kg-dw
72	TNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	10	Det	mg/kg-dw	M	6.58	mg/kg-dw
73	TNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	23	Det	mg/kg-dw	M	13.3	mg/kg-dw
74	TNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	45	Det	mg/kg-dw	M	30.5	mg/kg-dw
75	TNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	99	Det	mg/kg-dw	M	86.5	mg/kg-dw
76	TNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	110	Det	mg/kg-dw	M	113	mg/kg-dw
77	TNT	4-ADNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia fetida*	Yes	135	Det	mg/kg-dw	M	87.6	mg/kg-dw
78	TNT	TNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Lumbricus	*Lumbricus terrestris*	No	60	Det	mg/kg-dw	M	0.0200	mg/kg-dw
79	TNT	TNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Lumbricus	*Lumbricus terrestris*	No	214	Det	mg/kg-dw	M	0.400	mg/kg-dw
80	TNT	TNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	367	Det	mg/kg-dw	M	11.9	mg/kg-dw
81	TNT	TNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	116	Det	mg/kg-dw	M	19.7	mg/kg-dw
82	TNT	TNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	130	Det	mg/kg-dw	M	10.9	mg/kg-dw
83	TNT	TNT	Detrivore	Whole-body	Oligochaeta	Haplotaxida	Lumbricidae	Eisenia	*Eisenia andrei*	Yes	116	Det	mg/kg-dw	M	11.7	mg/kg-dw

Appendix A-2. Soil Invertebrate Bioaccumulation (Uptake) Database

						Soil Characteristics												
Record NO	Study Location	Sub-Location	Lab / Field	Duration	Duration Units	Soil Texture	pH	OM%	CEC	Conductivity	Sulfate	%Clay	%Gravel	%Sand	%Silt	%TOC	Soil Ca	Reference
61	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
62	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
63	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
64	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
65	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
66	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
67	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
68	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
69	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
70	Lab	--	Lab	14	d	--	7.8	3.8	--	--	--	8	--	83	9	--	--	Lachance et al. 2004
71	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
72	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
73	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
74	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
75	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
76	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
77	--	--	Lab	14	d	Sandy	5.8	4.2	2.6	--	--	3	--	92	5	--	--	Renoux et al. 2000
78	--	--	Lab	>10	d	--	--	--	--	--	--	--	--	--	--	--	--	Johson et al. 1999
79	--	--	Lab	>10	d	--	--	--	--	--	--	--	--	--	--	--	--	Johson et al. 1999
80	Quebec, C	C1	Field	10	d	--	6.81	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
81	Quebec, C	C2	Field	10	d	--	6.97	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
82	Quebec, C	C3	Field	10	d	--	7.03	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004
83	Quebec, C	A3	Field	10	d	--	6.81	--	--	--	--	--	--	--	--	--	--	Robidoux et al. 2004

Appendix B-1

Summary of Studies Included in the Plant Bioaccumulation (Uptake) Database

Reference:	Cataldo et al. 1993 (PNL SA-22362)
Analytes Considered:	TNT, RDX, Tetryl
Species:	Wheat and bland brome
Geographic Location of Study:	Lab
Exposure Duration:	60-d
Type of Tissue Analyzed:	Soil and various compartments in plants (leaf, stem, pod, seed, and root)
Type of Source Media Analyzed:	Soil and various plant parts
Analytical Method:	HPLC/UV
Soil Extraction Method:	Acetonitrile
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	Percent organic matter only.
Purpose of Study:	To analyze the fate of TNT, RDX and tetryl in soils and plants.
Notes:	TNT and tetryl were both metabolized a great deal in soil before they were taken up by plants. On the other hand, RDX was relatively persistent in soil. Authors found uptake of TNT was inversely related to soil percent organic matter. Since concentrations were given in wet-weight, a percent water content is assumed for each plant compartment and converted to dry-weight basis.

Reference:	Folsom et al. 1988
Analytes Considered:	TNT
Species:	Yellow nutsedge
Geographic Location of Study:	Lab
Exposure Duration:	45-d (plus 20-d pre-exposure to soil)
Type of Tissue Analyzed:	Plant leaves
Type of Source Media Analyzed:	Measured Soil and Plant leaves
Analytical Method:	Gas LC
Soil Extraction Method:	Benzene
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	Yes, available in Appendix A-1
Purpose of Study:	(1) To assess methods for soil treatment, extraction, and analyses; (2) To determine the effect of pH on TNT uptake by plants.
Notes:	Assumed soil and plant concentrations in dry-weight conc.

Reference:	Groom et al. 2002
Analytes Considered:	HMX
Species:	Native and agricultural plants
Geographic Location of Study:	Lab

Exposure Duration:	77-d
Type of Tissue Analyzed:	Aerial (leaf/stem) and root tissues
Type of Source Media Analyzed:	Soil and plants
Analytical Method:	HPLC - GC/MS
Soil Extraction Method:	Acetonitrile
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	Yes, available in Appendix A-1
Purpose of Study:	To investigate the potnetial of agricultural and native plants for use in phytoremediation.
Notes:	Used data from the author sent to Brad Sample, rather than estimating numbers from the figures.

Reference:	Lachance et al. 2003
Analytes Considered:	RDX, HMX, TNB, 2,4-DNT, 2,6-DNT
Species:	Alfalfa, ryegrass, Japanese millet
Geographic Location of Study:	Lab
Exposure Duration:	Various (14-d, 16-d, 19-d, 28-d, 42-d), but not uniformly applied to plant species tested.
Type of Tissue Analyzed:	Shoots
Type of Source Media Analyzed:	Mainly soil-to-plants, but has a small dataset on earthworm uptake on RDX and HMX
Analytical Method:	HPLC/UV
Soil Extraction Method:	Acetonitrile
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	pH=5.0, Sandy loam, available in Appendix A-1
Purpose of Study:	To assess how weathering of amended soil and changes in exposure concentration have on uptake potential of compounds in plants and soil invertebrates.
Notes:	All conc were in dry weight / Authors used initial measured concentration to derive BCFs, but we used final measured concentrations as this would be more realistic to field scenarios.

Reference:	Parsons et al. 2001
Analytes Considered:	Perchlorate anion
Species:	various aquatic, terrestrial plants and animals (whole body composits)
Geographic Location of Study:	Yuma, AZ/Lake Mead National Recreation Area and the Las Vegas Wash, NV / Allegany Ballistics Lab/ WV / Holloman AFB / Naval Surface Warfare Center, MD / Longhorn Army Ammunition Plant, TX
Exposure Duration:	Resident
Type of Tissue Analyzed:	Various
Type of Source Media Analyzed:	Soil, Water, Sediment
Analytical Method:	Ion chromatography and others
Soil Extraction Method:	Alumina (basic wash)

Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	No
Purpose of Study:	To determine if perchlorate are present in various biological media
Notes:	The biotic and abiotic media may not necessarily be co-located but could be grouped by location for each site.

Reference:	Price et al. 1997
Analytes Considered:	HMX, RDX, TNT
Species:	Lettuce, tomato, corn, yellow nutsedge
Geographic Location of Study:	Lab (used soil from an Army ammunition plant in Nebraska)
Exposure Duration:	45 - 80 d
Type of Tissue Analyzed:	Fruits, kernels, stovers, shoots, and leaves
Type of Source Media Analyzed:	Soil and various plant parts
Analytical Method:	HPLC/UV
Soil Extraction Method:	NA
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	Yes, available in Appendix A-1
Purpose of Study:	(1) To measure the uptake of explosives in edible plant tissues in contaminated soil. (2)To measure the effects of varying RDX and TNT in soil on plant uptake. (3) To measure uptake differences using different soil types.
Notes:	Tissue concentrations were reported in wet-weight basis; used percent water content from Table A4 to convert to dry-weight; all soil concentrations were in dry-weight, no conversion necessary. Irrigation study not incorporated as it was not applicable.

Reference:	Schneider et al. 1995
Analytes Considered:	RDX, TNT, and metabolites
Species:	Various Plants (e.g. arrowhead, corn, goldenrod)
Geographic Location of Study:	Iowa (Iowa Army Ammunition Plant)
Exposure Duration:	Resident
Type of Tissue Analyzed:	Root and Top
Type of Source Media Analyzed:	Soil and plant roots and aboveground portion
Analytical Method:	HPLC/UV
Soil Extraction Method:	Acetonitrile
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	No
Purpose of Study:	To evaluate the uptake of RDX and TNT in field plants from exposure to contaminated soil.
Notes:	

Reference:	Zellmer et al. 1995
Analytes Considered:	TNT, RDX, TNB, 2,4-DNT, 2,6-DNT, 4-ADNT, 2-ADNT

Species:	Agricultural crops (rye, oats) and various plant species
Geographic Location of Study:	Joliet Army Ammunition Plant, Joliet, IL, and lab
Exposure Duration:	Lab study: 4 and 6 months
Type of Tissue Analyzed:	Roots, shoots, and grains (seeds)
Type of Source Media Analyzed:	Soil and various plant tissues
Analytical Method:	HPLC/UV
Soil Extraction Method:	Acetonitrile
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	Soil pH, OM, CEC, and macronutrients, see Appendix A-1
Purpose of Study:	(1) To provide supporting data of the extend of TNT uptake by plants on contaminated soil; (2) To characterize how organic matter affect TNT uptake; (3) To determine the effect of organic matter on extractable TNT in contaminated soil.
Notes:	Soil concentrations were based on air-dried weight, plant concentrations presumed to be in dry-weight basis.

Appendix B-2

Summary of Studies Included in the Earthworm Bioaccumulation (Uptake) Database

Reference:	Johnson et al. 1999
Analytes Considered:	TNT, 2-Amino-DNT, and 4-Amino-DNT
Species:	Tiger salamander and spotted salamander
Geographic Location of Study:	Lab
Exposure Duration:	28-d
Type of Tissue Analyzed:	Tissue (decapitated)
Type of Source Media Analyzed:	Soil and earthworms
Analytical Method:	NA (other than indicating Mililtary Unique and Special Chemistry Program)
Soil Extraction Method:	NA (other than indicating Mililtary Unique and Special Chemistry Program)
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	No
Purpose of Study:	Bioaccumulation of oral and dermal uptake to the salamanders
Notes:	Source media were analyzed at beginning, midpoint, and at the end/Estimated conc were used but ND assumed zero concentration

Reference:	Parsons et al. 2001
Analytes Considered:	Perchlorate anion
Species:	various aquatic, terrestrial plants and animals (whole body composits)
Geographic Location of Study:	Yuma, AZ/Lake Mead National Recreation Area and the Las Vegas Wash, NV / Allegany Ballistics Lab/ WV / Holloman AFB / Naval Surface Warfare Center, MD / Longhorn Army Ammunition Plant, TX
Exposure Duration:	Resident
Type of Tissue Analyzed:	Various
Type of Source Media Analyzed:	Soil, Water, Sediment
Analytical Method:	Ion chromatography and others
Soil Extraction Method:	Alumina (basic wash)
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	No
Purpose of Study:	To determine if perchlorate are present in various biological media
Notes:	The biotic and abiotic media may not necessarily be co-located but could be grouped by location for each site.

Reference:	Lachance et al. 2003
Analytes Considered:	RDX, HMX, TNB, 2,4-DNT, 2,6-DNT
Species:	Alfalfa, ryegrass, Japanese millet
Geographic Location of Study:	Lab
Exposure Duration:	Various (14-d, 16-d, 19-d, 28-d, 42-d), but not uniformly applied to plant species tested.
Type of Tissue Analyzed:	Shoots
Type of Source Media Analyzed:	Mainly soil-to-plants, but has a small dataset on earthworm uptake on RDX and HMX
Analytical Method:	HPLC/UV
Soil Extraction Method:	Acetonitrile

Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	pH=5.0, Sandy loam, see Appendix A-2
Purpose of Study:	To assess how weathering of amended soil and changes in exposure concentration have on uptake potential of compounds in plants and soil invertebrates.
Notes:	All conc were in dry weight / Authors used initial measured concentration to derive BCFs, but we used final measured concentrations as this would be more realistic to field scenarios. Lachance indicated that all concentrations were expressed in dry-weight basis (personal communication).

Reference:	Lachance et al. 2004
Analytes Considered:	TNT, 2,4-ADNT, 4-ADNT, 2,4-DANt, 2,6-DANT
Species:	Earthworm (E. andrei)
Geographic Location of Study:	Lab
Exposure Duration:	14-d
Type of Tissue Analyzed:	Whole-body
Type of Source Media Analyzed:	Soil
Analytical Method:	HPLC/UV
Soil Extraction Method:	Acetonitrile
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	Sandy loam forest soil, see Appendix A-2
Purpose of Study:	(1) To assess the acute toxicity of TNT and its metabolites and (2) To assess the bioaccumulation potential of TNT and its metabolites in earthworms.
Notes:	Bioaccumulation data not used from worm that were exposed to concentration beyond LC50.

Reference:	Renoux et al. 2000
Analytes Considered:	TNT, 2-ADNT, 4-ADNT, 2,4-DANT
Species:	Earthworm (*E. andrei*)
Geographic Location of Study:	Lab
Exposure Duration:	2-d and 14-d, followed by 24 hr depuration
Type of Tissue Analyzed:	Whole-body
Type of Source Media Analyzed:	Forest soil
Analytical Method:	HPLC/UV
Soil Extraction Method:	Acetonitrile
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	Available

Purpose of Study:	(1) To assess the ability of earthworm to biodegrade TNT, and (2) to characterize the extend of TNT biodegradation by earthworms by analyzing the distribution of TNT and its metabolite in soil and in earthworm and by identifying the enzymatic activity of the earthworms.
Notes:	Bioaccumulation data not used from worm that were exposed to concentration beyond LC50.

Reference:	Robidoux et al. 2004
Analytes Considered:	TNT, 4-ADNT, and 2-ADNT
Species:	Earthworm (E. andrei and A. rosea)
Geographic Location of Study:	Lab
Exposure Duration:	10-d, followed by 8 hr depuration
Type of Tissue Analyzed:	Whold-body
Type of Source Media Analyzed:	Soil and earthworms
Analytical Method:	HPLC/UV
Soil Extraction Method:	Acetonitrile
Soil Characteristics (pH, CEC, % OM, % Clay, etc.) Presented:	pH and water holding capacity available
Purpose of Study:	To assess the toxicity of TNT in soil to earthworms, and to measure biomarks of exposure, including tissue residues in mesocosms.
Notes:	Authors found TNT metabolites in earthworms not correlated with TNT soil concentrations.