US ERA ARCHIVE DOCUMENT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



WASHINGTON, D.C. 20460
OPP OFFICIAL RECORD
HEALTH EFFECTS DIVISION
SCIENTIFIC DATA REVIEWS
EPA SERIES 361

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

Date:

22 January 2007

Subject:

Acetochlor. Acute and Chronic Dietary Exposure Assessments to Support New Uses on Sweet Corn, Pop Corn and Sorghum & New Rotational Crop Tolerances on Potatoes, Sugar Beets, Sunflower Seeds, Dried Shelled Peas and Beans (Crop Subgroup 6C) and Cereal Grains, Except Rice and Corn (Crop Group 15).

arida

PC Code: 121601

Decision No.: 300987

Convas Davio

DP Number: 275018

From:

Donna S. Davis, Chemist

RRB1

Health Effects Division (7509P)

Through:

Sheila Piper, Chemist Shala Riper

P. Yvonne Barnes, Chemist

Dietary Exposure Science Advisory Council

Health Effects Division (7509P)

and

Christina Swartz, Chief

RAB2

Health Effects Division (7509P)

To:

Vickie Walters/Jim Tompkins

PM 25

Herbicide Branch

Registration Division (7505P)

MAR 20 RETURNED

Dietary Exposure Assessment

Barcode: D275018

Executive Summary

Acute and chronic dietary risk assessments were conducted using the Dietary Exposure Evaluation Model (DEEM-FCIDTM, Version 2.03) which use food consumption data from the U.S. Department of Agriculture's Continuing Surveys of Food Intakes by Individuals (CSFII) from 1994-1996 and 1998. The analyses were performed to support Section 3 requests for new uses on sweet corn, pop corn and sorghum as well as new rotational crop tolerances for potato, sugar beets, sunflower seeds, dried shelled peas and beans (crop subgroup 6C) and cereal grains, except corn and rice (crop group 15).

Results of Acute Dietary Exposure Analysis

The acute dietary analysis was based on tolerance level residues and 100% crop treated assumptions for all commodities. Experimentally derived processing factors were used for cereal grain commodities.

The drinking water values used in the acute dietary risk assessment were based on information provided by the Acetochlor Registration Partnership water monitoring program. Exposure to acetochlor parent was significantly higher in the surface water monitoring sites than the ground water monitoring sites; therefore, the concentration used in the acute dietary assessment was from a surface water monitoring site that produced the highest concentration of 0.01821 ppm.

The results of the acute dietary analysis for **food only** indicate that <u>acute dietary risks</u> (food only) do not exceed HED's level of concern (less than 100% of the acute population adjusted dose (aPAD)) for the U.S. population and all subgroups. At the 95th percentile, the U.S. population has an exposure from food only that results in a risk that is equivalent to < 1 % of the aPAD. The most highly exposed subpopulation is "children 1-2 years of age". At the 95th percentile, this subpopulation has an exposure from food only that results in a risk equivalent to <1 % of the aPAD.

The results of the aggregate acute dietary analysis for **food and water** indicate that <u>acute dietary</u> risks (food and water) do not exceed HED's level of concern (less than 100% of the acute population adjusted dose (aPAD)) for the U.S. population and all subgroups. At the 95th percentile, the U.S. population has an exposure from food and water that results in a risk that is equivalent to <1 % of the aPAD. The most highly exposed subpopulation is "all infants". At the 95th percentile, this subpopulation has an exposure from food and water that is equivalent 2.6 % of the aPAD.

Results of Chronic Dietary Exposure Analysis

The chronic dietary analysis included anticipated residues from field trial data and 100% crop treated assumptions for all commodities. Experimentally derived processing factors were used for cereal grain commodities.

The drinking water values used in the chronic dietary risk assessment were based on information provided by the Acetochlor Registration Partnership water monitoring program. Exposure to acetochlor parent was significantly higher in the surface water monitoring sites than the ground water monitoring sites; therefore, the concentration used was from a surface water monitoring

site that produced the highest time-weighted annualized mean (TWAM) concentration for a single year of 0.00143 ppm.

The results of the chronic dietary analysis for **food only** indicate that <u>chronic dietary risks</u> (<u>food only</u>) do not exceed HED's level of concern (less than 100% of the chronic population adjusted dose (<u>cPAD</u>)) for the U.S. population and all subgroups. The U.S. population exposure from food only results in a risk that is equivalent to <1% of the cPAD. The most highly exposed subpopulation is "children 1-2 years of age" with an exposure that results in a risk equivalent to <1% of the cPAD.

The results of the aggregate chronic dietary analysis for **food and water** indicate that <u>chronic dietary risks</u> (food and water) do not exceed HED's level of concern for the U.S. population and <u>all subgroups</u>. The U.S. population exposure from food and water results in a risk that is equivalent to <1% of the cPAD. The most highly exposed subpopulation is "children 1-2 years of age" with an exposure that results in a risk which is equivalent to 1.2% of the cPAD.

Results of Cancer Dietary Exposure Analysis

HED has determined that it is no longer appropriate to regulate cancer risk for acetochlor using a Q_1 ; however, nasal tumors in the rat, for which a mode of action has been identified, remain as a tumor of concern for human exposure. The chronic RfD, which is based on a NOAEL of 2 mg/kg/day, is considered to be protective of the nasal tumors, for which a point of departure of 10 mg/kg/day was identified. As noted above, chronic dietary risks do not exceed HED's level of concern.

I. Background

Dietary risk assessment incorporates both exposure and toxicity of a given pesticide. For acute and chronic assessments, the risk is expressed as a percentage of a maximum acceptable dose (i.e., the dose which HED has concluded will result in no unreasonable adverse health effects). This dose is referred to as the population adjusted dose (PAD). The PAD is equivalent to the NOAEL (acute or chronic) divided by safety factors including factors for interspecies uncertainty, intraspecies uncertainty, LOAEL to NOAEL extrapolation factor, subchronic to chronic extrapolation factor, database uncertainty factors and the FQPA safety factor. HED notes that the reference dose (RfD) is defined as the NOAEL (acute or chronic) divided by the safety factors noted above, with the exception of the FQPA safety factor; thus where the FQPA safety factor is equivalent to one, the PAD will be equivalent to the RfD.

For acute and non-cancer chronic exposures, HED is concerned when estimated dietary risk exceeds 100% of the PAD. References which discuss the acute and chronic risk assessments in more detail are available on the EPA/pesticides web site: "Available Information on Assessing Exposure from Pesticides, A User's Guide," 6/21/2000, web link: http://www.epa.gov/fedrgstr/EPA-PEST/2000/July/Day-12/6061.pdf; or see SOP 99.6 (08/20/1999)

The most recent dietary risk assessment for acetochlor was conducted by Samuel Ary (06/30/2005, D297061). That dietary risk assessment was conducted to support development of

a human health risk assessment for the FPQA Tolerance Reassessment Progress and Risk Management Decision (TRED) document. Both the registered uses (field corn and rotational sorghum, soybeans and wheat) and the new uses which are the subject of this analysis were included in that assessment. Subsequent to completion of the previous analysis, HED has determined that a dietary cancer risk assessment based on a Q₁^{*} value is no longer required for this chemical; therefore, many of the refinements applied to the previous assessments are no longer necessary.

HED is conducting this dietary risk assessment to support new uses for acetochlor on sweet corn, pop corn and sorghum, as well as to add rotational crop tolerances for potatoes, sugar beets, sunflower seed, dried peas and dried beans (crop subgroup 6C) and cereal grains, except rice and corn (crop group 15. As a point of clarification, HED notes that there is an existing tolerance for inadvertent residues of acetochlor in/on sorghum as a rotational crop. The most recent petition for acetochlor requests a direct use to sorghum. Residue values in this assessment reflect the proposed new use and are a result of direct application to sorghum as a primary crop.

II. Residue Data

Tolerances for residues of acetochlor in/on field corn as a result of direct application, and tolerances for inadvertent residues of acetochlor in/on sorghum, soybeans and wheat are currently listed in 40CFR§180.470. The residues of concern in plants includes parent and any metabolites containing the ethyl methyl aniline (EMA) or hydroxyethyl methyl aniline (HEMA) moiety, expressed in acetochlor equivalents. The residues of concern in rotational crops are acetochlor, its EMA and HEMA type metabolites as well as its hydroxymethyl ethyl aniline (HMEA) type metabolites. HED has concluded that the tolerance expression for rotational crops should include only acetochlor and its EMA and HEMA type metabolites; however HMEA type should be included in the risk assessment.

For the acute dietary analysis, tolerance level residues were used for all crops. 100% crop treated was assumed for all commodities in the assessment. Experimentally derived processing factors were applied to processed cereal grain commodities.

For the chronic dietary analysis, average field trial residue values were used for all crops. 100% crop treated was assumed for all commodities in the assessment. Experimentally derived processing factors were applied to processed cereal grain commodities.

A summary of the data and residue estimates used in these dietary risk assessments is included as Attachment 1.

There are several notable changes to the dietary risk assessment from the prior analysis dated 6/30/05 which are summarized as follows:

- Since a cancer specific dietary risk assessment is no longer required for this chemical, many of the refinements previously applied to the assessment are no longer required.
- A primary crop tolerance of 0.05 ppm is being recommended for sorghum as a result of

direct application of acetochlor to sorghum as a primary crop, which will supersede the current tolerance for inadvertent residues in/on sorghum as a rotational crop.

Barcode: D275018

- Rye commodities where added to the acute and chronic assessments.
- HED recently reviewed an oat processing study (45322122.der, D. Davis, 06/20/2006). The processing factor for oat flour of 0.5X was incorporated into the analysis for barley flour, buckwheat flour, oat flour, rye flour, triticale flour and wheat flour for the acute and chronic dietary assessments. Additionally, the oat groats processing factor of 0.4X from the same study was applied to oat groats in the acute and chronic assessments.
- HED recently reviewed rotational field trial data for sunflower commodities (45322106.der, D. Davis), sugar beets (45322103.der, D. Davis, 06/20/2006), dried shelled peas (45322104.der, D. Davis, 06/20/2006) and dried shelled beans (45322105,der, D. Davis, 06/20/2006). In each study, residue data were collected from these rotational commodities planted after treatment of a primary crop of corn with acetochlor. Data were collected for ethyl methyl aniline (EMA) type metabolites and for hydroxyethyl methyl aniline (HEMA) type metabolites. No residue data were collected for the metabolite, hydroxymethyl ethyl aniline (HMEA), a rotational crop metabolite of concern. However based on previously reviewed confined rotational crop data in three diverse crops which demonstrated that residues of HMEA type metabolites were consistently less than residues of HEMA type metabolites, which were in turn less than residues of EMA type metabolites, HED has concluded that residues of HMEA type metabolites are not likely to be significant in those samples where both EMA and HEMA residues were not detected. Combined residues of EMA and HEMA were less than the method LOQ of 0.04 ppm in all samples. Since no detectable residues were found in all samples, an anticipated residue value of ½ LOQ or 0.02 ppm was used for the chronic dietary assessment for sunflower, sugar beets, dried peas and dried beans.

III. Percent Crop Treated Data

HED assumed 100 percent crop treated for the new uses to sweet corn, pop corn and sorghum, as well as 100 percent crop treated for all the new rotational crops. Further, both the acute and chronic assessments also assumed 100 percent crop treated for all existing uses.

IV. Drinking Water Data

EFED previously provided HED with estimated drinking water values derived from monitoring data to support the exiting use on field corn (M. Barrett, EFED memorandum, 01/03/2005). EFED has reviewed the new use proposal and has concluded that there is a very low probability that drinking water exposure from the new uses would exceed those exposures previously estimated for corn. (M. Barrett, D332524, 09/13/2006); therefore, HED has used the corn monitoring data based drinking water concentrations for this assessment.

The drinking water values used in the dietary risk assessment were based on information

Barcode: D275018

provided by the Acetochlor Registration Partnership (ARP) water monitoring program. The Environmental Fate and Effects Division (EFED) analyzed and reported the data in the following memorandum: "Drinking Water Exposure Assessment for Acetochlor" (M. Barrett, EFED Memorandum, 01/03/2005). Water residues were incorporated in the DEEM-FCID™ into the food categories "water, direct, all sources" and "water, indirect, all sources". Characterization of the water monitoring program and complete details of the uncertainties associated with the program may be found in the EFED memorandum.

Exposure to acetochlor parent was significantly higher in the surface water monitoring sites than the ground water monitoring sites. The concentration used in the acute dietary assessment was from a surface water monitoring site (214-GI-IL) that produced the highest concentration of 0.01821 ppm. The concentration used in the chronic dietary assessment was from a surface water monitoring site (214-GI-IL) that produced the highest time-weighted annualized mean (TWAM) concentration for a single year of 0.00143 ppm.

V. DEEM-FCID™ Program and Consumption Information

Acetochlor acute and chronic dietary exposure assessments were conducted using the Dietary Exposure Evaluation Model software with the Food Commodity Intake Database (DEEM-FCIDTM, Version 2.03), which incorporates consumption data from USDA's Continuing Surveys of Food Intakes by Individuals (CSFII), 1994-1996 and 1998. The 1994-1996, 1998 data are based on the reported consumption of more than 20,000 individuals over two non-consecutive survey days. Foods "as consumed" (e.g., apple pie) are linked to EPA-defined food commodities (e.g. apples, peeled fruit - cooked; fresh or N/S; baked; or wheat flour - cooked; fresh or N/S, baked) using publicly available recipe translation files developed jointly by USDA/ARS and EPA. For chronic exposure assessment, consumption data are averaged for the entire U.S. population and within population subgroups, but for acute exposure assessment are retained as individual consumption events. Based on analysis of the 1994-96, 98 CSFII consumption data, which took into account dietary patterns and survey respondents, HED concluded that it is most appropriate to report risk for the following population subgroups: the general U.S. population, all infants (<1 year old), children 1-2, children 3-5, children 6-12, youth 13-19, adults 20-49, females 13-49, and adults 50+ years old.

For chronic dietary exposure assessment, an estimate of the residue level in each food or food-form (e.g., orange or orange juice) on the food commodity residue list is multiplied by the average daily consumption estimate for that food/food form to produce a residue intake estimate. The resulting residue intake estimate for each food/food form is summed with the residue intake estimates for all other food/food forms on the commodity residue list to arrive at the total average estimated exposure. Exposure is expressed in mg/kg body weight/day and as a percent of the cPAD. This procedure is performed for each population subgroup.

For acute exposure assessments, individual one-day food consumption data are used on an individual-by-individual basis. The reported consumption amounts of each food item can be multiplied by a residue point estimate and summed to obtain a total daily pesticide exposure for a deterministic exposure assessment, or "matched" in multiple random pairings with residue values and then summed in a probabilistic assessment. The resulting distribution of exposures is

expressed as a percentage of the aPAD on both a user (i.e., only those who reported eating relevant commodities/food forms) and a per-capita (i.e., those who reported eating the relevant commodities as well as those who did not) basis. In accordance with HED policy, per capita exposure and risk are reported for all tiers of analysis. However, for tiers 1 and 2, any significant differences in user vs. per capita exposure and risk are specifically identified and noted in the risk assessment.

VI. Toxicology Information

All dietary endpoints and doses referenced and discussed in the detail in HED's most recent human health risk assessment (D292336, A. Protzel, 03/01/2006) remain unchanged with the exception of the cancer classification.

The HED Cancer Assessment Review Committee (CARC) has recently revisited the cancer classification for acetochlor. HED has reclassified acetochlor as "suggestive evidence of carcinogenicity". The Committee determined that the relationship of the mouse lung tumors, on which the Q^+ was based, to treatment was equivocal, due to some inconsistencies in doseresponse between the two available mouse studies, the relatively frequent occurrence of the tumor in older mice and the lack of evidence of direct genotoxicity of acetochlor. Therefore, HED concludes that regulation of cancer risk based on the Q_+^+ is no longer appropriate. Further, HED notes that an increase in histocytic sarcomas in female mice in one study was also considered to be equivocal and only possibly treatment-related.

Nasal tumors in the rat, for which a mode of action has been identified, remain as a tumor of concern for human exposure. The RfD, which is based on a NOAEL of 2 mg/kg/day, is considered to be protective of the nasal tumors, for which a point of departure of 10 mg/kg/day was identified. Full documentation of the CARC decision is forthcoming.

Endpoints and doses for dietary risk assessment are summarized in Table 1.

	Table I. Summary of Foxicological Doses and Emilpoints for Acetochlor for Use in Dietary Human Health Risk Assembnents							
Expostire/Scenario	Point of Departure	Uncertainty/ FQPA SF	Level or Concern for RA	Study & Toxic Effects				
Acute Dietary (general population including females 13 – 49 years old)	NOAEL 150 mg/kg/day	$UF_{A} = 10$ $UF_{B} = 10$ $UF_{OB} = 10$	Acute RfD = 0.15 mg/kg/day Acute PAD = 0.15 mg/kg/day	Acute oral neurotoxicity screening in rats LOAEL = 500mg/kg/day based on decreased motor activity in females.				
Chronic Dietary (all populations)	NOAEL = 2.0 mg/kg/day	UF _A = 10 UF _H = 10	Chronic RfD = 0.02 mg/kg/day Chronic PAD = 0.02 mg/kg/day	Chronic oral toxicity in beagle dogs LOAEL = 10 mg/kg/day based on increased salivation and histopathology in the testes, kidney and liver.				
Cancer	Nasal tumors in concern for hur	n the rat, for which man exposure. The protective of the	he RfD, which is bas	city" has been identified, remain as a tumor of sed on a NOAEL of 2 mg/kg/day, is which a point of departure of 10				

VII. Results/Discussion

Results of Acute Dietary Exposure Analysis

The results of the acute dietary analysis for **food only** indicate that <u>acute dietary risks (food only)</u> do not exceed HED's level of concern (less than 100% of the acute population adjusted dose (aPAD)) for the U.S. population and all subgroups. At the 95th percentile, the U.S. population exposure from food only results in a risk equivalent to < 1 % of the aPAD. The most highly exposed subpopulation is "children 1-2 years of age" with an exposure equivalent to <1 % of the aPAD at the 95th percentile.

The results of the aggregate acute dietary analysis for **food and water** indicate that <u>acute dietary risks</u> (food and water) do not exceed HED's level of concern for the U.S. population and all <u>subgroups</u>. At the 95th percentile, the U.S. population exposure from food only results in a risk equivalent to <1 % of the aPAD. The most highly exposed subpopulation is "all infants". At the 95th percentile, this subpopulation has an exposure that is equivalent to 2.6 % of the aPAD.

The results of the acute dietary exposure analysis (with and without water) at the 95^{th} , 99^{th} , and 99.9^{th} percentiles of exposure are reported in Tables 2 and 3, below.

Dietary Exposure Assessment

Barcode: D275018

Table 2. Resu	Table 2. Results of Acute Dietary Exposure Analysis Using DEEM FCID - Food Only										
		95 th Per	centile	99 th Perce	ntile:	99.9 th Pe	rcentile				
Population Subgroup	aPAD (mg/kg/day)	Exposure (mg/kg/day)	% aPAD*	Exposure (mg/kg/day)	% aPAD*	Exposure (mg/kg/day)	%aPAD*				
General U.S. Population	0.15	0.000531	<1	0.000860	<1	0.001495	1.0				
All Infants (< year old)	0.15	0.000909	<1	0.001429	<1	0.002335	1.6				
Children 1-2 years old	0.15	0.001014	< j	0.001581	1	0.004725	3.2				
Children 3-5 years old	0.15	0.000927	<1	0.001375	<1	0.003588	2.4				
Children 6-12 years old	0.15	0.000694	<.1	0.001016	<1	0.001425	<1				
Youth 13-19 years old	0.15	0.000503	<]	0.000755	<1	0.001378	<1				
Adults 20-49 years old	0.15	0.000380	<1	0.000572	<1	0.000927	<1				
Adults 50+ years old	0.15	0.000283	<1	0.000404	<1	0.000615	<1				
Females 13-49 years old	0.15	0.000372	<1	0.000549	<1	0.000884	<1				

^{*}Most highly exposed subgroup is bolded.

		i. Me	entile .	99 ⁹ Percer	rtfle	99.07 Pe	centile
Population Subgroup	aPAD (ing/kg/day),	Exposure (markeyday)	% iPADY	Expostre (mg/kg/day)	% apad:	Exposure : (mg/kg/day)	% «PAD»
General U.S. Population	0.15	0.001302	< 1	0.002187	1.5	0.004023	2.7
All Infants (< 1 year old)	0.15	0.003967	2.6	0.005577	3.7	0.009314	6.2
Children 1-2 years old	0.15	0.002223	1.5	0.003486	2.3	0.005843	3.9
Children 3-5 years old	0.15	0.002066	1.4	0.002939	2.0	0.005287	3.5
Children 6-12 years old	0.15	0.001438	< }	0.002062	1.4	0.002679	1.8
Youth 13-19 years old	0.15	0.001067	<]	0.001691	1.1	0.002546	17
Adults 20-49 years old	0.15	0.001117	< 1	0.001702	1.1	0.002998	2.0
Adults 50+ years old	0.15	0.000960	< 1	0.001360	< 1	0.002106).4
Females 13-49 years old	0.15	0.001106	< 1	0.001674	1.1	0.002933	2.0

Most highly exposure subgroup is bolded.

Results of Chronic Dietary Exposure Analysis

The results of the chronic dietary analysis for food only indicate that chronic dietary risks (food only) do not exceed HED's level of concern (less than 100% of the chronic population adjusted dose (cPAD)) for the U.S. population and all subgroups. The U.S. population exposure from food only results in a risk which is equivalent to <1% of the cPAD. The most highly exposed subpopulation is "children 1-2 years of age" with an exposure equivalent to <1% of the cPAD.

The results of the aggregate chronic dietary analysis for **food and water** indicate that <u>chronic</u> dietary risks (food and water) do not exceed HED's level of concern for the U.S. population and all subgroups. The U.S. population exposure from food and water results in a risk which is equivalent to <1% of the cPAD. The most highly exposed subpopulation is "children 1 -2" with an exposure equivalent to 1.2% of the cPAD.

The results of the chronic dietary exposure analysis (with and without water) are reported in Tables 4 and 5, below.

Cancer Dietary Exposure Results and Characterization

As noted above, the HED CARC has recently revisited the cancer classification for acetochlor. HED has reclassified acetochlor as "suggestive evidence of carcinogenicity" and determined that regulation of cancer risk using a Q₁ is no longer appropriate. Nasal tumors in the rat, for which a mode of action has been identified, remain as a tumor of concern for human exposure. The RfD, which is based on a NOAEL of 2 mg/kg/day, is considered to be protective of the nasal tumors, for which a point of departure of 10 mg/kg/day was identified.

Since chronic dietary risks (food only) and aggregate chronic dietary risks (food and water) based on the RfD do not exceed HED's level of concern, HED does not have concern for dietary cancer risks associated with the proposed new and existing uses of acetochlor.

Table 4. Summary of Dietary Exposure and Risk for Acetocislor – Food Only											
	Acute E (95th P e r	the former of the Power of the last the first the last	Chronic 2	Dietary	Cancer						
Population Subgroup	Dietary Exposure (ing/kg/day)	% aPAD	Dietary Exposure (mg/kg/day)	% cPAD	Dietary Exposure (mg/kg/day) Risk						
General U.S. Population	0.000531	·<1	0.000090	<1							
All Infants (< 1 year old)	0.000909	<1	0.000122	<1	A separate quantitative cancer risk assessment is						
Children 1-2 years old	0.001014	<1	0.000205	1.0							
Children 3-5 years old	0.000927	<1	0.000204	1.0	not required. Since chronic risks do not exceed HED's level of concern, HED has no concern for cancer risks as a result of these new and existing uses.						
Children 6-12 years old	0.000694	<1	0.000144	<1							
Youth 13-19 years old	0.000503	<1	0.000097	<1							
Adults 20-49 years old	0.000380	< {	0.000073	<1							
Adults 50+ years old	0.000283	<1	0.000056	<1	onedig uses.						
Females 13-49 years old	0.000372	<1	0.000070	<1							

Table 5. Summary of	Dietary Dx;	osure and	Risk for Acetochlor - Food & Water					
	Acute D (95th Per		Chronic	Dietary	Cancer			
Population Subgroup	Dietary Exposure (mg/kg/day)	%aPAD	Dietary Exposure (mg/kg/day)	%°¢PAD	Dietary Exposure (mg/kg/day) Risk			
General U.S. Population	0.001302	< 1	0.000120	<1				
All Infants (< 1 year old)	0.003967	2.6	0.000220	1.1				
Children 1-2 years old	0.002223	1.5	0.000250	1.2	A separate quantitative cancer risk assessment is not required. Since chronic risks do not			
Children 3-5 years old	0.002066	1.4	0.000246	1.2				
Children 6-12 years old	0.001438	< 1	0.000173	<1	exceed HED's level of			
Youth 13-19 years old	0.001067	< 1	0.000119	<1	concern, HED has no concern for cancer risks a			
Adults 20-49 years old	0.001117	< 1	0.000101	<1	a result of these new and existing uses.			
Adults 50+ years old	0.000960	< 1	0.000086	<1				
Females 13-49 years old	0.001106	< 1	0.000098	<1				

VIII. Characterization of Inputs/Outputs

The acute and chronic dietary risk assessments are considered only minimally refined.

The acute analysis was conducted using tolerance level residues for all commodities. These tolerance level residues were derived from field trial data conducted at the maximum application rate and minimum PHI permitted on the proposed or existing labels. Of note is that for all rotational crops, no residues were found at the analytical method limits of quantitation (LOQ), the level used to establish the tolerances. For all commodities 100% crop treated was assumed. A limited number of experimentally derived processing factors were used to refine the acute analysis. HED concludes that the acute exposure estimates are unlikely to underestimate actual acute exposure.

The chronic dietary assessment was conducted using anticipated residue values derived from crop field trials. As noted above, these field trials represent maximum application rates and minimum PHIs. In virtually all cases, no detectable residues at the analytical method LOQ; therefore, an anticipated residue value of ½ LOQ was used for the chronic assessment. For all commodities 100% crop treated was assumed. A limited number of experimentally derived processing factors were used to refine the analysis. HED concludes that the chronic exposure estimates in this analysis are unlikely to underestimate actual exposure.

Dietary Exposure Assessment

Barcode: D275018

IX. Conclusions

HED conducted acute and chronic dietary exposure and risk assessments to support new direct uses on sweet corn, pop corn and sorghum, as well as to add rotational crop tolerances for potatoes, sugar beets, sunflower seed, dried pea, dried beans and cereal grains (except rice and corn) using the DEEM-FCIDTM, Version 2.03 which uses food consumption data from the USDA's Continuing Surveys of Food Intakes by Individuals (CSFII) from 1994 – 1996 and 1998.

The acute analysis is considered minimally refined with the incorporation of experimentally determined processing factors for cereal grain commodities. Residue values for all commodities are based on tolerances. All commodities were assumed to be 100% crop treated. The chronic dietary risk assessments were refined by the incorporation of anticipated residues derived from field trial data reflecting the maximum label application rate and minimum PHI, as well as by the use of experimental processing factors for cereal grain commodities. All commodities were assumed to be 100% crop treated. Additional refinements are possible for both analyses; therefore HED concludes that the acute and chronic dietary exposure analyses are unlikely to underestimate exposure and risk.

Acute and chronic exposures and risks do not exceed HED's level of concern for the U.S. population. Further, acute and chronic exposures and risks do not exceed HED's level of concern for all relevant subpopulations.

X. List of Attachments

Attachment | Data and Residue Estimates Used in Dietary Analysis

Acute Dietary Exposure & Risk

Attachment 2. Acetochlor Acute Dietary Analysis Input File - Food Only

Attachment 3. Acetochlor Acute Dietary Analysis Results - Food Only

Attachment 4. Acetochlor Acute Dietary Analysis Input File - Food & Water

Attachment 5. Acetochlor Acute Dietary Analysis Results - Food & Water

Chronic Dietary Exposure & Risk

Attachment 6. Acetochlor Chronic Dietary Analysis Input File - Food Only

Attachment 7. Acetochlor Chronic Dietary Analysis Results - Food Only

Attachment 8. Acetochlor Chronic Dietary Analysis Input File - Food & Water

Attachment 9. Acetochlor Chronic Dietary Analysis Results - Food & Water

cc with attachments: D. Davis, S. Piper, P.Y. Barnes

Attachment 1. Data and Residue Estimates Used in Dietary Analyses

40,50140	agagaga katalong dan					
	Chrome (Tol.	AR (0.02)	AR (0.02)	AR (0.02)	AR (0.02)	AR (0.02)
	Auticipated Residue Estimates/Polerance Acute (Tol., AR, RDE)	Tol (0.05)	Tol (0.05)	Tol (0.05)	Tol (0.05)	Tol (0.05)
Data and Residue Estimates Used in Diseary Analyses	Progsby Freezy	None	Flour at 0.5X Groats at 0.4X MRID 45322112	Flour, meal, starch and oil at 0.6X	None	None
Used in D	to%	100	001	100	100	100
timates 1	Pop	0.04	0.035	0.03	0.04	0.04
Sesione III	No. of Detectable Residues	0	O	2 @ 0.03	0	÷
ata and I	No.of Samples	24 @ <0.04	17 @ <0.035	58@ <0.03 2@ 0.03	32 @ <0.04	Peas 10 @ <0.04 Beans 18 @ <0.04
	politics.	Tolerance & Field Trial Data 45322103	Tolerance & Field Trial Data 45322108	Tolerance & Field Trial Data 41592014 42713114 42713115	Tolerance & Field Trial Data 44107105	Tolerance & Field Trial Data 45322104 45322105
	Glestication ¹	В	В	В	NB/PB	æ
	BAC	Beet, Sugar	Cercal grain, except corn, sorghum and rice, group 15 (barley, buckwheat, millet, oat, rye. rriticale, wheat)	Corn, field and pop, grain	Com, sweet, K- CWHR	Pea and bean, dried shelled, except soybean. subgroup 6C

Data No. of Source Description No. of Acricipated Residue Processing Acute (Tol., AR) Ctronic (Tol.) Source Sample Residues LOD %CT Fractors Residue AR) Tolerance & Field Trial Data 10 @ 0 0.04 100 Dried at 6.5X Tol (0.05) AR (0.02) 45322107 N/A N/A N/A N/A N/A 100 Oil at 0.2X Tol (0.1) Tol (0.1) Tolerance & Field Trial Data 16 @ 0 0.04 100 None Tol (0.05) Tol (0.05) Tol (0.05) Trial Data -c0.04 0 0.04 100 None Tol (0.05) Tol (0.05) Trial Data -c0.04 N/A N/A N/A N/A N/A N/A N/A Monitoring Data N/A N/A </th <th>5 3 1</th> <th></th> <th>Table 6. Dr</th> <th>ita and</th> <th>tesidue Est</th> <th>imates</th> <th>Used in D</th> <th>ata and Residue Estimates Used in Dietary Analyses</th> <th></th> <th></th>	5 3 1		Table 6. Dr	ita and	tesidue Est	imates	Used in D	ata and Residue Estimates Used in Dietary Analyses		
& Field 10 @ 0 0.04 100 Dried at 6.5X Tol (0.05) <0.04 N/A N/A 100 Plour at 0.75X Tol (0.1) N/A N/A 100 MRID 45322110 Tol (0.1) & Field 16 @ 0 0 0.04 100 None Tol (0.05) g Data N/A N/A N/A N/A N/A O.01821	Clasification S	7 8	auree	No. of Samples	No. of Detectable Residues	LOD	, AG	Processing Factors	Anticipated Residue Estimates/Toleranc Acute (Tol., AR, RDF)	Chronic (Tol.
N/A N/A N/A 100 Oil at 0.2X Oil at 0.2X Oil at 0.2X Tol (0.1) N/A N/A 100 None None Tol (0.05) & Field co.04 0 0.04 i 00 N/A Tol (0.05) g Data N/A N/A N/A N/A 0.01821	Tolerance NB/PB/B Trial Data 45322107	Toleran Trial De 453221	ce & Field nta 07	10 @ <0.04	0	0.04	100	Dried at 6.5X	Tol (0.05)	AR (0.02)
& Field co.03 I6 @ co.04 0 0.04 100 None Tol (0.05) g Data N/A N/A N/A N/A 0.01821	B Tolcrance	Tolcran	e,	N/A	N/A	ΝΆ	001	Flour at 0.75X Oil at 0.2X MRID 4532110	Tol (0.1)	Tol (0.1)
d 16 @ 0 0.04 1.00 None Tol (0.05)	B Tolerance	Tolerand	8	N/A	N/A	N/A	100	Nonc	Tol (0.05)	Tol (0.05)
N/A N/A N/A 0.01821	PB/B Trial Data 45322106	Toleran Trial Da 453221	ce & Field ita 36	16 @ <0.04	0	0.04	100	Notic	Tol (0.05)	ÁR (0.02)
	N/A Monitor	Monitor	ing Data	N/A	N/A	N/A	N/A	N/A	0.01821	0.00143

N/A = not applicable
1. Classification of blended (B), partially blended (PB), not blended (NB).
2. Chronic ARs are based on ½ LOQ

Barcode: D275018

Acetochlor

Attachment 2. Acetochlor Acute Dietary Analysis Input File - Food Only

U.S. Environmental Protection Agency Ver. 2.00
DEEM-FCID Chronic analysis for ACETOCHLOR 1994-98 data
Residue file: C:\Documents and Settings\ddavis05\DEEM files\Acetochlor\acet acute
100CT food.R98

Adjust. #2 NOT used Analysis Date 01-03-2007 Residue file dated: 01-03-2007/10:14:10/8 Comment:Acute analysis food only all commodites at 100% CT; processing factors and tolerance level residue used.

Adj.Factors Comment Food Crop Residue #1. EPA Code Grp Food Name (mqq) ----------.......... 15000250 15 Barley, pearled barley 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100%CT 1.000 new ro 0.050000 1.000 15000251 15 Barley, pearled barley-babyfood Full comment: new rot crop tol: 100%CT 0.050000 0.500 1.000 15000260 15 Barley, flour new ro Full comment: new rot crop tol; 100% CT; PF used 0.050000 0.500 15000261 15 Barley, flour-babyfood 1.000 new ro Full comment: new rot crop tol; 100% CT; PF used 15000270 15 Barley, bran 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 06030300 6C Bean, black, seed 0.050000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 06030320 6C Bean, broad, seed 0.050000 new ro Full comment: new rot crop tol; 100% CT 06030340 6C Bean, cowpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 06030350 6C Bean, great northern, seed new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 06030360 6C Bean, kidney, seed 0.050000 new ro Full comment: new rot crop tol; 100% CT 0.050000 1.000 06030380 6C Bean, lima, seed 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 06030390 6C Bean, mung, seed 0.050000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 06030400 6C Bean, navy, seed 0.050000 new ro Full comment: new rot crop tol; 100% CT 1.000 0.050000 1.000 06030410 6C Bean, pink, seed new ro Full comment: new rot crop tol; 100% CT 06030420 6C Bean, pinto, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 01010520 1A Beet, sugar 1.000 1.000 0.050000 new ro Full comment: new rot crop tol; 100% CT 01010521 1A Beet, sugar-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 01010530 1A Beet, sugar, molasses 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000650 15 Buckwheat 0.050000 1.000 1.000new ro Full comment: new rot crop tol; 100% CT 15000660 15 Buckwheat, flour 0.500 0.050000 1.000 new ro Full comment: new rot crop tol; 100% CT; PF used 06030980 6C Chickpea, seed 1.000 0.050000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, flour 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 0.050000 15001210 15 Corn, field, meal 0.600 1.000 existi Full comment: existing use; 100% CT 15001211 15 Corn, field, meal-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT

Acetochlor	Dietary Exposure A	Assessment		Barcod	e: D275018
	Corn, field, bran	0.050000	1.000	1.000	existi
15001230 15 C	existing use; 100% CT Corn, field, starch existing use; 100% CT	0.050000	0.600	1.000	existi
15001231 15 C	orn, field, starch-babyfood	0.050000	0.600	1.000	existi
15001240 15 C	existing use; 100% CT Corn, field, syrup existing use; 100% CT	0.050000	1.000	1.000	existi
15001241 15 C	orn, field, syrup-babyfood existing use; 100% CT	0.050000	1.000	1.000	existi
15001250 15 C	orn, field, cil existing use; 100% CT	0.050000	0.600	1.000	existi
15001251 15 C	Corn, field, cil-babyfood existing use; 100% CT	0.050000	0.600	1.000	existi
15001260 15 C	orn, pop new tolerance; 100% CT	0.050000	1.000	1.000	new to
15001270 15 C	Corn, sweet new tolerance; 100% CT	0.050000	1.000	1.000	new to
15001271 15 C	Corn, sweet-babyfood new tolerance; 100% CT	0.050000	1.000	1.000	new to
06031820 6C G	Suar, seed new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
06031821 6C G	Suar, seed-babyfood new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
06032030 6C L	entil, seed new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
15002260 15 M	Willet, grain new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
15002310 15 0	hat, bran new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
15002320 15 0	at, flour new rot crop tol; 100% CT; PF u	0.050000 sed	0.500	1.000	new ro
15002321 15 0	at, flour-babyfood new rot crop tol; 100% CT; PF u	0.050000	0.500	1.000	new ro
15002330 15 0	<pre>pat, groats/rolled oats new rot crop tol; 100% CT; PF u</pre>	0.050000	0.400	1.000	new ro
15002331 15 0	<pre>pat, groats/rolled oats-babyfood new rot crop tol; 100% CT; PF u</pre>	0.050000	0.400	1.000	new ro
06032560 6C P	ea, dry new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
06032551 6C P	Pea, dry-babyfood new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
06032580 6C P	ea, pigeon, seed new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
01032960 1C P	Potato, chips new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
01032970 1C P	Otato, dry (granules/ flakes) new rot crop tol; 100% CT; PF u	0.0500 00 .sed	6.500	1.000	new ro
01032971 1C P	Potato, dry (granules/ flakes)-b new rot crop tol; 100% CT; PF u	0.050000	6.500	1.000	new ro
01032980 1C P	Potato, flour new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
01032981 1C P	otato, flour-babyfood new rot crop tol; 100% CT	0.050000	1.000	1.000	uem to
01032990 1C P	rotato, tuber, w/peel new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
	ctato, tuber, w/peel-babyfcod new rot crop to1; 100% CT	0.050000	1.000	1.000	new rc
01033000 1C P	otato, tuber, w/o peel new rot crop tol; 100% CT	0.050000	1.000	1.000	new rc
01033001 1C P	otato, tuber, w/o peel-babyfood new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
15003380 15 R Full comment:	Ye, grain new rot crop tol; 100% CT	0.050000	1.000	1.000	new ro
Full comment:	ye, flour new rot crop tol; 100% CT; PF u		0.500	1.000	new ro
15003440 15 S Full comment:	orghum, grain new tolerance; 100% CT	0.050000	1.000	1.000	new to
	orghum, syrup new tolerance; 100% CT	0.050000	1.000	1.000	new to

Acetochlor	Dietary Exposure Assessment	t	Barcoo	le: D275018
06003470 6 Soybean, seed	0.100	000 1.000	1.000	establ
Full comment: established - ro			3,1000	
06003480 6 Soybean, flour	0.100	000 0.750	1.000	establ
Full comment: established - ro				
06003481 6 Soybean, flour-bab	yfood 0.100	000 0.750	1.000	establ
Full comment: established - ro		ed		
06003490 6 Soybean, soy milk	0.100		1.000	establ
Full comment: established - ro	t crop; 100% CT			
06003491 6 Soybean, soy milk-		000 1.000	1.000	establ
Full comment: established - ro				
06003500 6 Soybean, oil	0.100		1.000	establ
Full comment: established - ro				
06003501 6 Soybean, oil-babyf			1.000	establ
Full comment: established - ro				
20003640 20 Sunflower, seed	0.050	000 1.000	1.000	new ro
Full comment: new rot crop tol		"	4 000	
20003650 20 Sunflower, oil	0.050	000 1.000	1.006	new ro
Full comment: new rot crop to		000 1 000	1 000	
20003651 20 Sunflower, oil-bab		000 1.000	1.000	new ro
Full comment: new rot crop tol	; 100%CT 0.050	000 0.500	1.000	27 (27) 10 (27
15003810 15 Triticale, flour Full comment: new rot crop tol	-	000 0.500	1.000	new ro
15003811 15 Triticale, flour-k		000 0.500	1.000	new ro
Full comment: new rot crop tol		000 0.500	1.000	iicw to
15004010 15 Wheat, grain	0.050	000 1.000	1.000	establ
Full comment: established - re		000 7.000	2.000	cocani
15004011 15 Wheat, grain-babyf		000 1.000	1.000	establ
Full comment: established - re		1.000	1,000	
15004020 15 Wheat, flour	0.050	000 0.500	1.000	establ
Full comment: established - ro				
15004021 15 Wheat, flour-babyf			1.000	establ
Full comment: established - ro	t crop; 100 % CT; PF U	sed		
15004030 15 Wheat, germ	0.050		1.000	establ
Full comment: established - ro	t crop; 100 % CT			
15004040 15 Wheat, bran	0.050	000 1.000	1.000	establ
Full comment: established - re	t crop; 100 % CT			

Dietary Exposure Assessment

Attachment 3. Acetochlor Acute Dietary Analysis Results – Food Only

U.S. Environmental Protection Agency

Ver. 2.02

Barcode: D275018

DEEM-FCID ACUTE Analysis for ACETOCHLOR

(1994-98 data)

Residue file: acet acute 100CT food.R98

Adjustment factor #2 NOT used.

Analysis Date: 01-03-2007/13:38:28 Resid

Residue file dated: 01-03-2007/10:14:10/8

NOEL (Acute) = 150.000000 mg/kg body-wt/day

Daily totals for food and foodform consumption used.

Run Comment: "Run with new commodities at tolerance & 100% CT"

Summary calculations (per capita):

95th Percenti	le	99th	Percenti	le	99.9th	Percen	tile
Exposure & aRfD	MOE	Exposure	% aRfD	MOE	Exposure %	aRfD	MOE
U.S. Population:							
0.000531 0.35	282415	0.000860	0.57	174474	0.001495	1.00	100348
All infants:							
0.000909 0.61	165055	0.001429	0.95	104961	0.002335	1.56	64242
Children 1-3 yrs:							
0.001014 0.68	147988	0.001581	1.05	94849	0.004725	3.15	31747
Children 3-5 yes:							
0.000927 0.62	161897	0.001375	0.92	109096	0.003588	2.39	41808
Children 6 13 yrs:							
0.000694 0.46	216083	0.00101€	0.68	147706	0.001425	0.95	105268
Youth 13-19 yes:							
0.000503 0.34	298229	0.000755	0.50	198742	0.001378	0.92	108830
Adults 20-49 yrs:							
0.000380 0.25	394503	0.000572	0.38	262224	0.000927	0.62	161790
Adults 50+ yrs:							
	530538	0.000404	0.27	370944	0.000615	0.41	243957
Females 13-49 yrs:							
0.000372 0.25	403006	0.000549	0.37	273371	0.000884	0.59	1.69745

Acetochlor

Barcode: D275018

Attachment 4. Acetochlor Acute Dietary Analysis Input File (Food & Water)

U.S. Environmental Protection Agency Ver. 2.00
DEEM-FCID Chronic analysis for ACETOCHLOR 1994-98 data
Residue file: C:\Documents and Settings\ddavis05\DEEM files\Acetochlor\acet acute

100CT f_w.R98

Analysis Date 01-03-2007 Residue file dated: 01-03-2007/10:16:37/8 Comment:Acetochlor Acute Analysis Food and Water; 100% CT for all commodities tolerance level residues and processing factors used.

15000250 15	Food Crop		Adj.Fa	ctors	Comment
15000250 15 Barley, pearled barley	EPA Code Grp Food Name	(ppm)			
Full comment: new rot crop tol; 1008CT 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.0					
15000251 15 Barley, pearled barley-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT; PF used 15000260 15 Barley, flour		0.0000	1.000	1.000	11CW 1.0
Full comment: new rot crop tol; 1008CT 1,0000 0,500 1,000 new rot		0.050000	1.000	1.000	new ro
15000260 15 Barley, flour					
15000261 15 Barley, flour-babyfood 0.050000 0.500 1.000 new ro rol roul comment: new rot crop tol; 100% CT; PF used 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.		0.050000	0.500	1.000	new ro
Pull comment: new rot crop tol; 100% CT; PF used	Full comment: new rot crop tol; 100% CT; PF	used			
15000270 15 Barley, bram 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 1.000 new row Full comment: new rot crop tol; 100% CT 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.0	15000261 15 Barley, flour-babyfood		0.500	1.000	new ro
### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new rot crop to1; 100% CT ### Full comment: new			1 000	1 001	
06030300 6C Bean, black, seed 0.050000 1.000 new repull comment: new rot crop tol; 100% CT 06030320 6C Bean, broad, seed 0.050000 1.000 1.000 new repull comment: new rot crop tol; 100% CT 06030340 6C Bean, cowpea, seed 0.050000 1.000 1.000 new repull comment: new rot crop tol; 100% CT 06030350 6C Bean, great northern, seed 0.050000 1.000 1.000 new repull comment: new rot crop tol; 100% CT 06030360 6C Bean, kidney, seed 0.050000 1.000 1.000 new repull comment: new rot crop tol; 100% CT 06030380 6C Bean, lima, seed 0.050000 1.000 1.000 new repull comment: new rot crop tol; 100% CT 06030390 6C Bean, mung, seed 0.050000 1.000 1.000 new repull comment: new rot crop tol; 100% CT 06030400 6C Bean, navy, seed 0.050000 1.000 1.005 new repull comment: new rot crop tol; 100% CT 06030410 6C Bean, pink, seed 0.050000 1.000 1.005 new repull comment: new rot crop tol; 100% CT 06030420 6C Bean, pink, seed 0.050000 1.000 1.000 new repull comment: new rot crop tol; 100% CT 06030420 6C Bean, pink, seed </td <td>_ · · · · · · · · · · · · · · · · · · ·</td> <td>0.050000</td> <td>1.000</td> <td>1.000</td> <td>new ro</td>	_ · · · · · · · · · · · · · · · · · · ·	0.050000	1.000	1.000	new ro
## Pull comment: new rot crop tol; 100% CT ## Color		0 050000	1 000	1 000	2000
06030320 6C Bean, broad, seed 0.050000 1.000 1.000 new reference Full comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new reference 06030340 6C Bean, cowpea, seed 0.050000 1.000 1.000 new reference 06030350 6C Bean, stanthern, seed 0.050000 1.000 1.000 new reference 06030360 6C Bean, kidney, seed 0.050000 1.000 1.000 new reference 06030380 6C Bean, kidney, seed 0.050000 1.000 1.000 new reference 06030380 6C Bean, kidney, seed 0.050000 1.000 1.000 new reference 06030390 6C Bean, may, seed 0.050000 1.000 1.000 new reference 06030400 6C Bean, may, seed 0.050000 1.000 1.000 new reference 06030410 6C Bean, pints, seed 0.050000 1.000 1.000 new reference 06030410 6C Bean, pints, seed 0.050000 1.000 1.000 new reference 06030410 6C Bean, pints, seed 0.050000 1.000 1.000 new reference		0.05000	1.000	1.000	new ro
Full comment: new rot crop tol; 100% CT 06030340 6C Bean, cowpea, seed		0.050000	1 000	1 000	TIPM TO
06030340 6C Bean, cowpea, seed pull comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rot composed programments. New rot crop tol; 100% CT 06030350 6C Bean, great northern, seed Full comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rot composed programments. New rot crop tol; 100% CT 06030380 6C Bean, lima, seed Full comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rot composed programments. New rot crop tol; 100% CT 06303400 6C Bean, mung, seed Full comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rot composed programments. New rot crop tol; 100% CT 0630400 6C Bean, pink, seed Sean, seed Sean, seed Sean, pink, seed Sean, seed Sean		0.02000	1,000	4.000	now re
## Pull comment: new rot crop tol; 100% CT		0.050000	1.000	1.000	new ro
1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.00					
06030360 6C Bean, kidney, seed		0.050000	1.000	1.000	new ro
### Part					
06030380 6C Bean, lima, seed		0.050000	1.000	1.000	new no
## Pull comment: new rot crop tol: 100% CT 06030390 6C Bean, mung, seed					
06030390 6C Bean, mung, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 6030410 6C Bean, pink, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 6030420 6C Bean, pinto, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000650 15 Buckwheat 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000650 15 Buckwheat, flour 0.050000 1.000 new ro Full comment: new rot crop tol; 100% CT 6030990 6C		0.050000	1.000	1.000	new mo
Full comment: new rot crop tol: 100% CT 06030400 6C Bean, navy, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol: 100% CT 06030410 6C Bean, pink, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol: 100% CT 06030420 6C Bean, pinto, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol: 100% CT 01010520 1A Beet, sugar 0.050000 1.000 1.000 new ro Full comment: new rot crop tol: 100% CT 01010521 1A Beet, sugar-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol: 100% CT 01010530 1A Beet, sugar, molasses 0.050000 1.000 1.000 new ro Full comment: new rot crop tol: 100% CT 15000650 15 Buckwheat 0.050000 1.000 1.000 new ro Full comment: new rot crop tol: 100% CT 15000660 15 Buckwheat, flour 0.050000 0.500 1.000 new ro Full comment: new rot crop tol: 100% CT; PF used 06030980 6C Chickpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol: 100% CT 06030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol: 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 new ro Full comment: new rot crop tol: 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT		0.00000	1 000	1 000	
06030400 6C Bean, navy, seed 0.050000 1.000 1.006 new rof crop tol; 100% CT 6030410 6C Bean, pink, seed 0.050000 1.000 1.000 new rof crop tol; 100% CT 6030420 6C Bean, pinto, seed 0.050000 1.000 1.000 new rof crop tol; 100% CT 1010520 1A Beet, sugar 0.050000 1.000 1.000 new rof crop tol; 100% CT 1010521 1A Beet, sugar, babyfood 0.050000 1.000 1.000 new rof crop tol; 100% CT 1010530 1A Beet, sugar, molasses 0.050000 1.000 1.000 new rof crop tol; 100% CT 15000650 15 Buckwheat 0.050000 1.000 1.000 new rof crop tol; 100% CT 15000660 15 Buckwheat, flour 0.050000 0.500 1.000 new rof crop tol; 100% CT 16030980 6C Chickpea, seed 0.050000 1.000 1.000 new rof crop tol; 100% CT 16030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new rof col; 100% CT 160030990 6C Chickpea, flour		0.050000	1.000	7.000	new ro
Full comment: new rot crop tol; 100% CT 06030410 6C Bean, pink, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030420 6C Bean, pinto, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 01010520 1A Beet, sugar 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 01010521 1A Beet, sugar-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 01010530 1A Beet, sugar, molasses 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000650 15 Buckwheat 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000660 15 Buckwheat, flour 0.050000 0.500 1.000 new ro Full comment: new rot crop tol; 100% CT 15000660 15 Chickpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030980 6C Chickpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, flour 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT		0 050000	1 000	1 000	new mo
06030410 6C Bean, pink, seed 0.050000 1.000 1.000 new refull comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 0.500 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 0.500 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 0.500 1.000 new rofull comment: new rot crop tol; 100% CT; PF used 0.050000 0.500 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 0.500 1.000 new rofull comment: new rot crop tol; 100% CT 0.050000 0.000 0.000 0.000 new rofull comment: new rot crop tol; 100% CT 0.050000 0.000 0.000 0.000 new rofull comment: new rot crop tol; 100% CT 0.050000 0.000 0.000 0.000 new rofull comment: new rot crop tol; 100% CT 0.050000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.		0.030000	1.000	1.000	MCW IO
Full comment: new rot crop tol; 100% CT 06030420 6C Bean, pinto, seed 0.050000 1.000 1.000 new rof Full comment: new rot crop tol; 100% CT 01010520 1A Beet, sugar 0.050000 1.000 1.000 new rof Full comment: new rot crop tol; 100% CT 01010521 1A Beet, sugar-babyfood 0.050000 1.000 1.000 new rof Full comment: new rot crop tol; 100% CT 01010530 1A Beet, sugar, molasses 0.050000 1.000 1.000 new rof Full comment: new rot crop tol; 100% CT 01010530 1B Buckwheat 0.050000 1.000 1.000 new rof Full comment: new rot crop tol; 100% CT 05000650 15 Buckwheat, flour 0.050000 0.500 1.000 new rof Full comment: new rot crop tol; 100% CT 06030980 6C Chickpea, seed 0.050000 0.500 1.000 new rof Full comment: new rot crop tol; 100% CT; PF used 06030980 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new rof Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new rof Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, flour 0.050000 1.000 1.000 new rof Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, flour 0.050000 0.600 1.000 existing use; 100% CT 06030910 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existing use; 100% CT 06030910 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existing use; 100% CT 06030910 15 Corn, field, meal 0.050000 0.600 1.000 existing use; 100% CT		0.050000	1.000	1.000	new ro
Full comment: new rot crop tol; 100% CT 01010520 1A Beet, sugar 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 01010521 1A Beet, sugar-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 01010530 1A Beet, sugar, molasses 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 01010530 1B Buckwheat 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000650 15 Buckwheat, flour 0.050000 0.500 1.000 new ro Full comment: new rot crop tol; 100% CT 15000660 15 Buckwheat, flour 0.050000 0.500 1.000 new ro Full comment: new rot crop tol; 100% CT; PF used 06030980 6C Chickpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, flour 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001210 15 Corn, field, meal 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT					
0.050000		0.050000	1.000	1.000	new ro
Full comment: new rot crop tol; 100% CT 01010521 1A Beet, sugar-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 01010530 1A Beet, sugar, molasses 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000650 15 Buckwheat 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000660 15 Buckwheat, flour 0.050000 0.500 1.000 new ro Full comment: new rot crop tol; 100% CT; PF used 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT; PF used 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030980 6C Chickpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001210 15 Corn, field, meal 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT					
01010521 1A Beet, sugar-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 01010530 1A Beet, sugar, molasses 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000650 15 Buckwheat 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000660 15 Buckwheat, flour 0.050000 0.500 1.000 new ro Full comment: new rot crop tol; 100% CT; PF used 06030980 6C Chickpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, flour 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT	. 2	0.050000	1.000	1.000	new ro
Full comment: new rot crop tol; 100% CT 01010530 1A Beet, sugar, molasses 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000650 15 Buckwheat 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000660 15 Buckwheat, flour 0.050000 0.500 1.000 new ro Full comment: new rot crop tol; 100% CT; PF used 06030980 6C Chickpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, flour 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001210 15 Corn, field, meal 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT					
01010530 1A Beet, sugar, molasses		0.050000	1.000	1.000	new ro
Full comment: new rot crop tol; 100% CT 15000650 15 Buckwheat 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15000660 15 Buckwheat, flour 0.050000 0.500 1.000 new ro Full comment: new rot crop tol; 100% CT; PF used 06030980 6C Chickpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, flour 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001210 15 Corn, field, meal 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT		0 050000	1 000	1.000	
15000650 15 Buckwheat		0.050000	1.000	1.000	new ro
Full comment: new rot crop tol; 100% CT 15000660 15 Buckwheat, flour 0.050000 0.500 1.000 new ro Full comment: new rot crop tol; 100% CT; PF used 06030980 6C Chickpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, flour 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001210 15 Corn, field, meal 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT		0.050000	1 000	1 000	new ma
15000660 15 Buckwheat, flour 0.050000 0.500 1.000 new ro Full comment: new rot crop tol; 100% CT; PF used 06030980 6C Chickpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, flour 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001210 15 Corn, field, meal 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT		0.050000	1.000	1.000	11CW 1.57
Full comment: new rot crop tol; 100% CT; PF used 06030980 6C		0.050000	0.500	1.000	new ro
06030980 6C Chickpea, seed 0.050000 1.000 1.000 new ro Full comment: new rot crop to1; 100% CT 06030981 6C Chickpea, seed-babyfood 0.050000 1.000 1.000 new ro Full comment: new rot crop to1; 100% CT 06030990 6C Chickpea, flour 0.050000 1.000 1.000 new ro Full comment: new rot crop to1; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001210 15 Corn, field, meal 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT					
06030981 6C Chickpea, seed-babytood 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001210 15 Corn, field, meal 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT	06030980 6C Chickpea, seed		1.000	1.000	new no
Full comment: new rot crop tol; 100% CT 06030990 6C Chickpea, flour 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001210 15 Corn, field, meal 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT					
06030990 6C Chickpea, flour 0.050000 1.000 1.000 new ro Full comment: new rot crop tol; 100% CT 15001200 15 Corn, field, flour 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001201 15 Corn, field, flour-babyfood 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT 15001210 15 Corn, field, meal 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT		0.050000	1.000	1.000	new ro
Full comment: new rot crop tol; 100% CT 15001200 15		0.050000			
15001200 15	<u> - '</u>	0.050000	1.000	1,000	new ro
Full comment: existing use; 100% CT 15001201 15		0.00000	0.000	1 060	
15001201 15		0.030000	0.000	1.000	exist.
Full comment: existing use; 100% CT 15001210 15		0.050000	0.600	1 000	exieti
15001210 15 Corn, field, meal 0.050000 0.600 1.000 existi Full comment: existing use; 100% CT		0.00000	0.000	2.000	· · · · · · · · · · · · · · · · · · ·
Full comment: existing use; 100% CT		0.050000	0.600	1.000	existi
15001211 15 Corn, field, meal-babyfood 0.050000 0.600 1.000 existi	Full comment: existing use; 100% CT				
	15001211 15 Corn, field, meal-babyfood	0.050000	0.600	1.000	existi

Acetochlor	Dietary Exposure Assessment		Barcod	e: D275018
Full comment: existing use; 15001220 15 Corn, field, br		1.000	1 006	
Full comment: existing use;	; 100% CT	1.000	1.000	existi
15001230 15 Corn, field, st Full comment: existing use;		0.600	1,000	existi
15003231 15 Corn, field, st	tarch-babyfood 0.050000	0.600	1.000	existi
Full comment: existing use; 15001240 15 Corn, field, sy	yrup 0.050000	1.000	1.000	existi
Full comment: existing use; 15001241 15 Corn, field, sy Full comment: existing use;	yrup-babyfood 0.050000	1.000	1.000	existi
15001250 15 Corn, field, oi Full comment: existing use;	0.050000	0.600	1.000	existi
15001251 15 Corn, field, oi Full comment: existing use;	il-babyfood 0.050000	0.600	1.000	existi
15001260 15 Corn, pop Full comment: new tolerance	0.050000	1.000	1.000	new to
15001270 15 Corn, sweet Full comment: new tolerance	0.050000	1.000	1.000	new to
15001271 15 Corn, sweet-bak Full comment: new tolerance	byfood 0.050000	1.000	1.000	new to
06031820 60 Guar, seed Full comment: new rot crop	0.050000	1.000	1.000	new ro
06031821 60 Guar, seed-baby Full comment: new rot crop	yfood 0.050000	1.000	1.000	new ro
06032030 63 Sentil, seed Full comment: new rot crop	0.050000	1.000	1.000	new ro
15002260 15 Millet, grain Full comment: new rot crop	0.050000	1.000	1.000	new ro
15002310 15 Oat, bran Full comment: new rot crop	0.050000	1.000	1.000	new ro
15002320 15 Oat, flour Full comment: new rot crop	0.050000	0.500	1.000	new ro
15002321 15 Oat, flour-baby Full comment: new rot crop	yfood 0.050000	0.500	1.000	new ro
15002330 15 Oat, groats/rol Full comment: new rot crop	lled oats 0.050000	0.400	1.000	new ro
	lled oats-babyfood 0.050000	0.400	1.000	new ro
06032560 6C Pea, dry Full comment new rot crop	0.050000	1.000	1.000	new ro
06032561 6C Pea, dry-babyfo	ood 0.050 000	1.000	1.000	new ro
06032580 6C Fea, pigeon, se Full comment new rot crop	eed 0.050000	1.000	1.000	new ro
01032960 1C Potato, chips Full comment new rot crop	0.050000	1.000	1.000	new ro
01032970 1C Potato, dry (gr Full comment: new rot crop	canules/ flakes) 0.050000	6.500	1.000	new ro
	canules/ flakes)-b 0.050000	6.500	1.000	new ro
01032980 1C Potato, flour Full comment: new rot crop	0.050000	1.000	1.000	new ro
01032981 1C Potato, flour-b Full comment: new rot crop	pabyfood 0.050000	1.000	1.000	new ro
01032990 1C Potato, tuber, Full comment: new rot crop	w/peel 0.050000	1.000	1.000	new rc
01032991 1C Potato, tuber, Full comment: new rot crop	w/peel-babyfood 0.050000	1.000	1.000	new rc
01033000 1C Potato, tuber, Full comment: new rot crop	w/o peel 0.050000	1.000	1.000	new ro
	w/o peel-babyfood 0.050000	1.000	1.000	new ro
15003280 15 Fye, grain Full comment: new rot crop	0.050000	1.000	1.000	new ro
15003290 15 Sye, flour Full comment: new rot crop	0.050000	0.500	1.000	new ro
15003440 15 Sorghum, grain Full comment: new tolerance	0.050000	1.000	1.000	new to
15003450 15 Sorghum, syrup	0.050000	1.000	1.000	new to

Acetochlor Die	tary Exposure Ass	sessment		Barcode	D275018
Full comment: new tolerance; 100%	СТ				
06003470 6 Soybean, seed		0.100000	1.000	1.000	establ
Full comment: established - rot c	rop; 100% CF				
06003480 6 Soybean, flour		0.100000	0.750	1.000	establ
Full comment: established - rot c					
06003481 6 Soybean, flour-babyfo	od	0.100000	0.750	1.000	establ
Full comment: established - rot c	rop; 100% CT;				
06003490 6 Soybean, soy milk		0.100000	1.000	1.000	establ
Full comment: established - rot c					
06003491 6 Soybean, soy milk-bab		0.100000	1.000	1.000	establ
Full comment: established - rot c	rop; 100% CT				
06003500 6 Soybean, oil		0.100000	0.200	1.000	establ
Full comment: established - rot c					
06003501 6 Soybean, oil-babyfood		0.100000	0.200	1.000	establ
Full comment: established - rot c	rop; 100% CT;				
20003640 20 Sunflower, seed		0.050000	1.000	1,000	new ro
Full comment: new rot crop tol; 1	00%CT				
20003650 20 Sunflower, oil		0.050000	1.000	1.000	new ro
Full comment: new rot crop tol; 1					
20003651 20 Sunflower, oil-babyfo		0.050000	1.000	L.000	new ro
Full comment: new rot crop tol; 1	00%CT				
15003810 15 Triticale, flour		0.050000	0.500	1.000	new ro
Full comment: new rot crop tol; 1					
15003811 15 Triticale, flour-baby		0.050000	0.500	1.000	new ro
Full comment: new rot crop tol; 1					
86010000 O Water, direct, all so		0.018210	1.000	1.000	Based
Full comment: Based on corn monit					
86020000 O Water, indirect, all		0.018210	1.000	1.000	Based
Full comment: Based on corn monit	oring data				
15004010 15 Wheat, grain		0.050000	1.000	1.000	establ
Full comment: established - rot c					
15004011 15 Wheat, grain-babyfood		0.050000	1.000	1.000	establ
Full comment: established - rot c	rop; 100 % CT				
15004020 15 Wheat, flour		0.050000	0.500	1.000	establ
Full comment: established - rot c					
15004021 15 Wheat, flour-babyfood		0.050000	0.500	1.000	establ
	rop; 100 % CT				
15004030 15 Wheat, germ		0.050000	1.000	1.000	establ
Full comment: established - rot c	rop; 100 % CT				
15004040 15 Wheat, bran		0.050000	1.000	1000	est.abl
Full comment: established - rot c	rop; 100 % CT				

Dietary Exposure Assessment

Barcode: D275018

Attachment 5. Acetochlor Acute Dietary Analysis – Results – Food and Water

U.S. Environmental Protection Agency DEEM-FCID ACUTE Analysis for ACETOCHLOR

Ver. 2.02 (1994-98 data)

Residue file: acet acute 100CT f_w.R98 Analysis Date: 01-03-2007/13:39:37

Adjustment factor #2 NOT used. Residue file dated: 01-03-2007/10:16:37/8

NOEL (Acute) = 150.000000 mg/kg body-wt/day

Daily totals for food and foodform consumption used.

Run Comment: "Eun with new commodities at tolerance & 100% CT"

Summary calculations (per capita):

					99.9th		
Exposure & aRfD	MOE	Exposure	6 dRID	MOE	Exposure %	akib	MOE
U.S. Fopulation:							
0.001302).37	115186	0.002187	1.46	68574	0.004023	2.68	37286
All infants:							
0.003967 2.64	37808	0.005577	3.72	26893	0.009314	6.21	16104
Children 1-2 yrs:							
0.002223 1.48	67468	0.003486	2.32	43027	0.005843	3.90	25672
Children 3-5 yrs:							
0.002066 1.38	72616	0.002939	1.96	51040	0.005287	3.52	28369
Children 6-12 yrs:							
0.001438 0.96	104285	0.002062	1.37	72732	0.002679	1.79	55987
Youth 13-19 yrs:							
0.001067 0.71	140571	0.001691	1.13	88700	0.002546	1.70	58908
Adults 20-49 yrs:							
0.001117 0.74	134334	0.001702	1.13	88109	0.002998	2.00	50039
Adults 50+ yrs:							
0.000960 7.64		0.001360	0.91	110255	0.002106	1.40	71224
Females 13-49 yrs:							
0.001106 0.74	135571	0.001674	1.12	89592	0.002933	1.96	51140

Acetochlor

Barcode: D275018

Attachment 6. Acetochlor Chronic Dietary Analysis Input File - Food Only

U.S. Environmental Protection Agency Ver. 2.00
DEEM-FCID Chronic analysis for ACETOCHLOR 1994-98 data
Residue file: C:\Documents and Settings\ddavis05\DEEM files\Acetochlor\acet chronic

Residue file: C:\Documents and Settings\ddavis05\DEEM files\Acetochlor\acet chronic food.R98

Analysis Date 01-03-2007 Residue file dated: 12-19-2006/13:56:19/8

Reference dose (RfD) = 0.02 mg/kg bw/day Comment:Acetochlor Chronic Analysis; 100%CT, processing factors and ARs based on field trial used.

crtar used.				
Food Crop	Residue	Adj	.Factors	Comment
EPA Code Grp Food Name	(ppm)	#1	#2	
15000050 15				
15000250 15 Barley, pearled barley Full comment: new rot crop use; 1/2 L0Q; 100%		1.000	1.000	n e w ro
15000251 15 Barley, pearled barley-babyfood	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 L0Q; 100%		• •		
15000260 15 Barley, flour	0.020000	0.500	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%	CT; PF used			
15000261 15 Barley, flour-babyfood	0.020000	0.500	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%			1 000	
15000270 15 Barley, bran	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 L0Q; 100% 06030300 6C Bean, black, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		1.000	1.000	.10.0 10
06030320 6C Bean, broad, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%	CT			
06030340 6C Bean, cowpea, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%				
06030350 6C Bean, great northern, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		1 000	1.000	70 Ot 4 15 0
06030360 6C Bean, kidney, seed Full comment: new rot crop use; 1/2 LOQ; 100%	0.020000	1.000	1,000	new ro
06030380 6C Bean, lima, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		1.400	2.000	2
06030390 6C Bean, mung, seed	0.020000	1,000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%	CT			
06030400 6C Bean, navy, seed	0.020000	1.000	1.000	dew no
Full comment: new rot crop use; 1/2 LOQ; 100%				
06030410 6C Bean, pink, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100% 06030420 6C Bean, pinto, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		1.000	2.000	11CW 10
01010520 1A Beet, sugar	0.020000	1.000	1.000	new ro
Full comment: new rot crop use: 1/2 LOQ; 100%		•		
01010521 1A Beet, sugar-babyfood	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%	CT			
01010530 1A Beet, sugar, molasses	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		1 500	1 000	
15000650 15 Buckwheat	0.020000	1.000	1.000	new ro
Full comment: new rot crop use: 1/2 LOQ; 100% 15000660 15 Buckwheat, flour	0.020000	0.500	1.000	new ro
Full comment: new rot crop use: 1/2 LOQ; 100%			1,000	110 4 10
06030980 6C Chickpea, seed	0.020000	1.000	1,000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%	CT			
06030981 6C Chickpea, seed-babyfood	0.020000	1.000	1.600	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%				
06030990 6C Chickpea, flour	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100% 15001200 15 Corn, field, flour	0.020000	0.600	1.000	existi
Full comment: existing use	0.020000	0.000	1.500	SALSCE
15001201 15 Corn, field, flour-babyfood	0.020000	0.600	1.000	existí
Full comment: existing use				
15001210 15 Corn, field, meal	0.020000	0.600	1.000	existi
Full comment: existing use				
15001211 15 Corn. field, meal-babyfood	0.020000	0.600	1.000	existi

Acetochlor	Dietary Exposure A	ssessment		Barcod	e: D275018
Full comment: existing u					
15001220 15 Corn, field, Full comment: existing u		0.020000	1.000	1.000	existi
15001230 15 Corn, field,	starch	0.020000	0.600	1.000	existi
	starch-babyfood	0.020000	0.600	1.000	existi
Full comment: existing u 15001240 15 Corn, field,		0.020000	1.000	1.000	existi
Full comment: existing u 15001241 15 Corn, field,	se syrup-babyfood	0.020000	1.000	1.000	existi
Full comment: existing u 15001250 15 Corn, field,	se	0.020000	0.600	1.000	existi
Full comment: existing u	se				
15001251 15 Corn, field, Full comment: existing u	oil-babyfood se	0.020000	0.600	1.000	existi
15001260 15 Corn, pop Full comment: new tol; 1	/2 LOO; 100% CT	0.020000	1.000	1.000	new to
15001270 15 Corn, sweet Full comment: new tol; 1		0.020000	1.000	1.000	new to
15001271 15 Comm, sweet-	babyfood	0.020000	1.000	1.000	new to
Full comment: new tol; 1 06031820 60 Guar, seed		0.020000	1.000	1.000	new ro
Full comment: new rot cr 06031821 60 Guar, seed-b	abyfood	0.020000	1.000	1.000	new ro
Full comment: new rot cr 06032030 60 Lentil, seed		CT 0.020000	1.000	1.000	new ro
Full commens: new rot cr 15002260 15 Millet, grai	op use; 1/2 LOQ; 100%		1.000	1.000	new ro
Full comment: new rot cr		CT			
15002310 15 Oat, bran Full comment: new rot cr	op use; 1/2 LOQ; 100%		1.000	1.000	new ro
15002320 15 Oat, flour Full comment: new rot cr	op use; 1/2 LOQ; 100%	0.020000 CT; PF used	0.500	1.000	new ro
15002321 15 Oat, flour-b Full comment: new rot cr		0.020000 CT: PF used	0.500	1.000	new ro
15002330 15 Oat, groats/ Full comment: new rot cr	rolled oats	0.020000	0.400	1.000	new ro
15002331 15 Oat, groats/ Full comment: new rot cr	rolled oats-babyfood	0.020000	0.400	1.000	new ro
06032560 6€ Pea, dry		0.020000	1.000	1.000	new ro
Full comment: new rot cr 06032561 60 Pea, dry-bab		CT 0.020000	1.000	1.000	new ro
Full comment new rot cr 06032580 60 Pea, pigeon,	=	CT 0.020000	1.000	1.000	new ro
Full comment new rot cr 01032960 10 Potato, chip	op use; 1/2 LOQ; 100%		1.000	1.000	new ro
Full comment new rot cr	op use; 1/2 LOQ; 100%	CT	6.500		
Full comment new rot cr	(granules/ flakes) op use; 1/2 LOQ; 100%			1.000	new ro
01032971 10 Potato, dry Full comment: new rot cr	(granules/ flakes)-b op use; 1/2 LOQ; 100%	0.020000 CT: PF used	6.500	1.000	new ro
01032980 10 Potato, flou Full comment: new rot cr		0.020000 CT	1.000	1.000	new ro
01032981 IC Potato, flou Full comment: new rot cr	r-babyfood	0.020000	1.000	1.000	new ro
01032990 1C Potato, tube Full comment: new rot cr	r, w/peel	0.020000	1.000	1.000	new ro
01032991 1C Potato, tube	r, w/peel-babyfood	0.020000	1.000	1.000	new ro
Full comment: new rot cr 01033000 10 Potato, tube	-	CT 0.020000	1.000	1.000	new rc
Full comment: new rot cr 01033001 10 Potato, tube	op use; 1/2 LOQ; 100% r, w/o peel-babyfood	CT 0.020000	1.000	1.000	new rc
Full comment: new rot cre 15003280 15 Fye, grain		CT 0.020000	1.000	1.000	new ro
Full comment: new rot co 15003290 15 Eye, flour	op use; 1/2 LOQ; 100%		0.500	1.000	new ro
Full comment: new rot cr					
15003440 15 Sorghum, gra Full comment: new tol; to	ol; 100% CT		1.000	1.000	new to
15003450 15 Sorghum, syr	пр	0.050000	1.000	1.000	new to

Acetochlor Dietary Expo	sure As	sessment		Barcode	D275018
			<u>-</u>		
Full comment: new tol; tol; 100% CT		0 100000	1.000	1.000	existi
06003470 6 Soybean, seed	0. (777)	0.100000	1.000	1,000	extse1
Full comment: existing rot crop use; 1009	8 CT	0.100000	0.750	1,000	existi
06003480 6 Soybean, flour	Q. cam	0.100000	0.750	1.000	GXISEI
Full comment: existing rot crop use; 100% 06003481 6 Soybean, flour-babyfood	6 CT	0.100000	0.750	1.000	existi
Full comment: existing rot crop use; 1009	a com	0.100000	0.750	1.000	CVIRCI
06003490 6 Soybean, soy milk	9 CI	0.100000	1.000	1.000	existi
Full comment: existing rot crop use; 1009	e zim	0.100000	1.000	1.000	CVIPCI
06003491 6 Soybean, soy milk-babyfood or		0.100000	1.000	1.000	existi
Full comment: existing rot crop use; 1009		0.100000	1.000	1.000	avier
06003500 6 Soybean, oil	9 CI	0.100000	0.200	1.000	existi
Full comment: existing rot crop use; 100	o om	0.100000	0.200	1.000	GYT2C1
06003501 6 Soybean, oil-babyfood	9 CI	0.100000	0.200	1.000	existi
	a ar	0.100000	0.200	1.000	GYTRET
Full comment: existing rot crop use; 1009 20003640 20 Sunflower, seed	e CI	0.020000	1.000	1.000	new ro
• • • • • • • • • • • • • • • • • • • •	7000		1.000	1.000	new to
Full comment: new rot crop use; 1/2 LOQ; 20003650 20 Sunflower, oil	TOOLE	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ;	1009		1.000	1.000	TICM TO
20003651 20 Sunflower, oil-babyfood	1.00%	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ;	ገለለዩ		1.000	1.000	new io
15003810 15 Triticale, flour	TOOS	0.020000	0.500	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ;	1000		0.300	1.000	IICW EV
15003811 15 Triticale, flour-babyfood	1006	0.020000	0.500	1,000	non se
Full comment: new rot crop use; 1/2 LOQ;	1 0 0 9		0.300	1.000	new ro
15004010 15 Wheat, grain	1000	0.020000	1.000	1.000	existi
Full comment: existing rot crop use; 1005	e am	0.020000	1.000	1.000	EXISUL
15004011 15 Wheat, grain-babyfood	e CT	0.020000	1.000	1.000	existi
Full comment: existing rot crop use; 100	e cm	0.020000	1.000	1.000	GXTPUT
15004020 15 Wheat, flour	e CT	0.020000	0.500	1,000	existi
,,	Q am.		0.300	1,000	GYIRCI
Full comment: existing rot crop use; 1009 15004021 15 Wheat, flour-babyfood		0.020000	0.500	1.000	existi
Full comment: existing rot crop use; 100	Q. cam		9.500	1.000	existi
15004030 15 Wheat, germ	b CT;		1.000	1.000	existi
Full comment: existing rot crop use; 100	9 Cm	0.020000	1.000	1.000	EX12f1
15004040 15 Wheat, bran	e CT	0.00000	1 000	1 000	orel and
	o. om	0.020000	1.000	1.000	existi
Full comment: existing rot crop use; 1009	ъ CT				

Dietary Exposure Assessment

Barcode: D275018

Attachment 7. Acetochlor Chronic Dietary Analysis - Results - Food Only

U.S. Environmental Protection Agency Ver. 2.00
DEEM-FCID Chronic analysis for ACETOCHLOR (1994-98 data)
Residue file name: C:\Documents and Settings\ddavis05\DEEM files\Acetochlor\acet
chronic food.F98

Adjustment factor #2 NOT used.

Total Exposure

Analysis Date 01-03-2007/13:34:13 Residue file dated: 12-19-2006/13:56:19/8 Reference dose (RfD, Chronic) = .02 mg/kg bw/day

COMMENT 1: Acetochlor Chronic Analysis; 100%CT, processing factors and ARs based on field trial used.

Total exposure by population subgroup

Fopulation	mg/kg	Percent of
Subgroup	body wt/day	Rfd
C. Demilarian (total)	0.00000	6 40

	· · · · · · · · · · · · · · · · · · ·	
U.S. Population (total)	0.000090	0.4%
All infants (< 1 year)	0.000122	0.6%
Children 1-2 yrs	0.000205	1.0%
Children 3-5 yrs	0.000204	1.0%
Children 6-12 yrs	0.000144	C.7%
Youth 13-19 yrs	0.000097	0.5%
Adults 20-49 yrs	0.000073	0.4%
Adults 50+ yrs	0.000056	0.3%
Females 13-49 yrs	0.000070	0.3%

Acetochlor

Barcode: D275018

Attachment 8. Acetochlor Chronic Dietary Analysis Input File - Food and Water

U.S. Environmental Protection Agency Ver. 2.00 DEEM-FCID Chronic analysis for ACETOCHLOR 1994-98 data Residue file: C:\Documents and Settings\ddavis05\DEEM files\Acetochlor\acet chronic $f_w.R98$

Adjust. #2 NOT used Analysis Date 01-03-2007 Residue file dated: 12-19-2006/13:57:11/8

Reference dose (RfD) = 0.02 mg/kg bw/day

Comment: Acetochlor Chronic Food & Water; 100% CT, processing factors and ARs based on field trials used.

nul que		7.52 57.4		
Food Crop EPA Code Grp Food Name	Residue (ppm)	Adj. Fact	OIS	Comment
		#1	#2	
15000250 15 Barley, pearled barley	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		1.000	1.000	new 10
15000251 15 Barley, pearled barley-babyfood	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 L00; 100%				
15000260 15 Barley, flour	0.020000	0.500	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		0.500		
15000261 15 Barley, flour-babyfood Full comment: new rot crop use; 1/2 L0Q; 100%	0.020000	0.500	1.000	new ro
15000270 15 Barley, bran	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		1.000	1.000	11CW 10
06030300 6C Bean, black, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%	CT			
06030320 6C Bean, broad, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		1 000	1 000	
06030340 6C Bean, cowpea, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100% 06030350 6C Bean, great northern, seed		1.000	1,000	new ro
Full comment: new rot crop use: 1/2 LOQ; 100%		1.000	1,000	IICW 15
06030360 6C Bean, kidney, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use: 1/2 LOQ; 100%	CT			
06030380 6C Bean, lima, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use: 1/2 LOQ; 100%				
06030390 6C Bean, mung, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100% 06030400 6C Bean. navy, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use: 1/2 LOQ; 100%		1.000	1.000	110.00 7.10
06030410 6C Bean, pink, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%	CT			
06030420 6C Bean, pinto, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%				
01010520 1A Beet, sugar	0.020000	1.000	1,000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100% 01010521 1A Beet, sugar-babyfood	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		1.000	1.000	110# 10
01010530 1A Beet, sugar, molasses	0.020000	1.000	1,000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%	CT			
15000650 15 Buckwheat	0.020000	1.000	1,000	new ro
Full comment: new rot crop use: 1/2 LOQ; 100%		A 5-0-0	1	
15000660 15 Buckwheat, flour	0.020000	0.500	1.000	new ro
Full comment: new rot crop use: 1/2 LOQ; 100% 06030980 6C Chickpea, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		1.000	2.000	1100 3.0
06030981 6C Chickpea, seed-babyfood	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%	CT			
06030990 6C Chickpea, flour	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 100%		0.600	1 000	
15001200 15 Corn, field, flour Full comment: existing use	0.020000	0.600	1.000	existi
15001201 15 Corn, field, flour-babyfood	0.020000	0.600	1.000	existi
Full comment: existing use			~ 1000	
15001210 15 Corn, field, meal	0.020000	0.600	1.000	existi
Full comment: existing use				
15001211 15 Corn, field, meal-babyfood	0.020000	0.600	1.000	existi

Acetochlor	nlor Dietary Exposure Assessment			Barcode: D275018		
Full comment: existing use 15001220 15 Corn, field, bran	n	0.020000	1.000	1.000	existi	
Full comment: existing use						
15001230 19 Corn, field, star Full comment: existing use	cen	0.020000	0.600	1.000	existi	
15001231 15 Corn, field, star Full comment: existing use	rch-babyfood	0.020000	0.600	1.000	existi	
15001240 15 Corn, field, syru Full comment: existing use	ıp	0.020000	1.000	1.000	existi	
15001241 19 Corn, field, syru Full comment: existing use	ip-babyfood	0.020000	1.000	1.000	existi	
15001250 15 Corn, field, oil Full comment: existing use		0.020000	0.600	1.000	existi	
15001251 15 Corn, field, oil- Full comment: existing use	-babyfood	0.020000	0.600	1.000	existi	
15001260 15 Corn, pop Full comment: new tol; 1/2 LC	ነርነ 100ይ ሮሞ	0.020000	1.000	1.000	new to	
15001270 15 Corn, sweet Full comment: new tol; 1/2 LC		0.020000	1.000	1.000	new to	
15001271 15 Comm. sweet-babyf Full comment: new tol; 1/2 LC	ood	0.020000	1.000	1.000	new to	
06031820 6€ Guar, seed		0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 06031821 6C Guar, seed-babyfo Full comment: new rot crop us	pod	0.020000	1.000	1.000	new ro	
06032030 6C Lentil, seed Full comment: new rot crop us		0.020000	1.000	1.000	new ro	
15002260 15 Millet, grain		0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 15002310 15 Oat, bran		0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 15002320 15 Oat, flour		0.020000	0.500	1.000	new ro	
Full comment: new rot crop us 15002321 15 Oat, flour-babyfo	od	0.020000	0.500	1.000	new ro	
Full comment: new rot crop us 15002330 15 Oat, groats/rolle	ed oats	0.020000	0.400	1.000	new ro	
Full comment: new rot crop us 15002331 15 Oat, groats/rolle	ed oats-babyfood	0.020000	0.400	1.000	new ro	
Full comment, new rot crop us 06032560 6C Pea, dry		0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 06032561 6C Pea, dry-babyfood	i	0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 06032580 6C Pea, pigeon, seed	1	0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 01032960 1C Potato, chips		0.020000	1.000	1.000	new rc	
Full comment: new rot crop us 01032970 1C Fotato, dry (gran	ules/ flakes)	0.020000	6.500	1.000	new ro	
Full comment: new rot crop us 01032971 1C Potato, dry (gran	ules/ flakes)-b	0.020000	6.500	1.000	new ro	
Full comment: new rot crop us 01032980 1C Fotato, flour	se; 1/2 LOQ; 100%	O.020000	1.000	1.000	new ro	
Full comment: new rot crop us 01032981 10 Potato, flour-bak		CT 0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 01032990 10 Potato, tuber, w/		CT 0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 01032991 10 Fotato, tuber, w/	peel-babyfood	0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 01033000 1C Potato, tuber, w/		CT 0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 01033001 1C Potato, tuber, w/	o peel-babyfood	0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 15003280 15 Rye, grain		0.020000	1.000	1.000	new ro	
Full comment: new rot crop us 15003290 15 Rye, flour		0.020000	0.500	1.000	new ro	
Full comment: new rot crop us 15003440 15 Sorghum, grain		CT 0.050000	1.000	1.000	new to	
Full comment new tol; tol; 1 15003460 15 Sorghum, syrup	.ሀሀቴ ር <u>ጥ</u>	0.050000	1,000	1.000	new to	

Acetochlor Dietary Exposure	Assessment		Barcode:	D275018
Full comment: new tol; tol; 100% CT				
06003470 6 Sovbean, seed	0.100000	1.000	1.000	existi
Full comment: existing rot crop use; 100% C'		1.000	1.500	CALBO.
06003480 6 Soybean, flour	0.100000	0.750	1.000	existí
Full comment: existing rot crop use; 100% C		31.30	1.000	
06003481 6 Soybean, flour-babyfood		0.750	1.000	existi
Full comment: existing rot crop use; 100% C				
06003490 6 Soybean, soy milk	0.100000	1.000	1.000	existi
Full comment: existing rot crop use; 100% C	Γ			
06003491 6 Soybean, soy milk-babyfood or in		1.000	1.000	existi
Full comment: existing rot crop use; 100% C				
06003500 6 Soybean, oil	0.100000	0.200	1.000	existi
Full comment: existing rot crop use; 100% C'	Γ			
06003501 6 Soybean, oil-babyfood	0.100000	0.200	1.000	existi
Full comment: existing rot crop use; 100% C				
20003640 20 Sunflower, seed	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 10				
20003650 20 Sunflower, oil	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 10				
20003651 20 Sunflower, oil-babyfood	0.020000	1.000	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 10		0 500	1 000	
15003810 15 Triticale, flour	0.020000	0.500	1.000	new ro
Full comment: new rot crop use; 1/2 LOQ; 10: 15003811 15 Triticale, flour-babyfood	0.020000	0.500	1.000	
15003811 15 Triticale, flour-babyfood Full comment: new rot crop use; 1/2 LOQ; 10		0.500	1.000	new ro
86010000 0 Water, direct, all sources	0.001430	1.000	1.000	monito
Full comment: monitoring based EEC	0.001430	1.000	1.000	HOILEO
86020000 0 Water, indirect, all sources	0.001430	1.000	1.000	monito
Full comment: monitoring based EEC	0.001430	1.000	1,000	monn co
15004010 15 Wheat, grain	0.020000	1.000	1.000	existi
Full comment: existing rot crop use; 100% C		~.000	2,300	
15004011 15 Wheat, grain-babyfood	0.020000	1.000	1.000	existi
Full comment: existing rot crop use; 100% C				
15004020 15 Wheat, flour	0.020000	0.500	1.000	existi
Full comment: existing rot crop use; 100% C	r: new PF used		•	
15004021 15 Wheat, flour-babyfood	0.020000	0.500	1.000	existi
Full comment: existing rot crop use; 100% C	T; new PF used			
15004030 15 Wheat, germ	0.020000	1.000	1.000	existi
Full comment: existing rot crop use; 100% C	r			
15004040 15 Wheat, bran	0.020000	1.000	1.000	existi
Full comment: existing rot crop use; 100% C	ľ			

Dietary Exposure Assessment

Barcode: D275018

Attachment 9. Acetochlor Chronic Dietary Analysis - Results - Food & Water

U.S. Environmental Protection Agency Ver. 2.00 DEEM-FCID Chronic analysis for ACETOCHLOR (1994-98 data) Residue file name: C:\Documents and Settings\ddavis05\DEEM files\Acetochlor\acet chronic f_{w} .R98

Analysis Date 01-03-2007/13:35:39 Residue file dated: 12-19-2006/13:57:11/8

Reference dose (RfD, Chronic) = .02 mg/kg bw/day COMMENT 1: Acetochlor Chronic Food & Water; 100% CT, processing factors and ARs based

on field trials used.

Total exposure by population subgroup

Total	Exposure

Adjustment factor #2 NOT used.

Population Subgroup	mg/kg body wt/day	Percent of Rfd
U.S. Population (total)	0.000120	0.6%
All infants (< 1 year)	0.000220	1.1%
Children 1-2 yrs Children 3-5 yrs Children 6-12 yrs Youth 13-19 yrs Adults 20-49 yrs Adults 50+ yrs Females 13-49 yrs	0.000250 0.000246 0.000173 0.000119 0.000101 0.000086 0.600098	1.28 1.28 0.98 0.68 0.58 0.48



R142433

Chemical: Acetochlor

PC Code: 121601

HED File Code: 11000 Chemistry Reviews

Memo Date: 1/22/2007 File ID: DPD275018 Accession #: 000-00-0119

HED Records Reference Center 4/24/2007