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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OR

APR 20 1982

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

Subject: FAP#1H5310. Glyphosate on tea.
Amendment of 3/18/82.

From: Karl H. Arne, Ph.D, Chemist *KH Arne*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

Thru: Charles L. Trichilo, Chief *CT*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

To: Robert Taylor, Product Manager No. 25
Herbicide-Fungicide Branch
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

In our review of this petition (12/18/81) we recommended against the proposed tolerances. For a favorable recommendation we required the following:

1. Residue data for green tea.
2. The petitioner should inform us as to which countries the use on tea is intended and assure us that the use in Section B is the one they intend to propose for registration in those countries where residue data were generated. Additionally, the petitioner should provide us with information on the pesticide registration procedures in the countries where use is intended (Note: We already have information on the registration act in India).

With this amendment the petitioner has informed us that the previously submitted tea residue data from Taiwan were for green tea. The critical difference between green and black tea is a fermentation step; black tea is fermented, green tea is not. Tea from China is not fermented, therefore the residue data from Taiwan is for green tea. The studies from Taiwan show that no more residue is expected in green tea than in black tea. This deficiency is resolved.

As we requested the petitioner has indicated which countries in which this use is to be registered. These are India, Sri Lanka and Taiwan. The requested information on pesticide registration in Sri Lanka and Taiwan has not been submitted but is forthcoming. Resolution of deficiency 2 awaits this submission.

Also submitted is a Revised Section F in which food additive tolerances are proposed for tea (1 ppm) and instant tea (4 ppm). The original Section F had not indicated that the tolerance proposed for tea was a food additive tolerance.

Recommendation

We recommend against the proposed tolerances. Further consideration awaits submission of information on the pesticide registration procedures in Sri Lanka and Taiwan.

Note to the P.M.: When the 1 ppm tolerance to tea is established, it should be in terms of dried tea.

TS-769:RCB:K.H.Arne:MCH:CM#2:RM810:X77377:4/16/82
cc: RF, Circu., K. H. Arne, Thompson, TOX, EEB, EFB, FDA,
FAP#1H5310
RDI: Quick, 4/14/81; Schmitt, 4/14/82

File last updated: 3/23/82

RESIDUES OF PESTICIDES IN FOOD

| Sample No. | Concn | ppm | ADI | ppm |
|------------|-------|-----|-------|-------|
| 10/89 | 30.00 | 100 | 0.300 | 1.000 |

Published Tolerances

| Crop | Tolerance | Food Factor | mg/day (1.5kg) |
|----------------------------|-----------|-------------|----------------|
| Grain crops (04) | 0.100 | 13.75 | 0.00039 |
| Avocado (06) | 0.200 | 0.03 | 0.00009 |
| Citrus fruits (33) | 0.200 | 3.81 | 0.01144 |
| Coffee (30) | 1.000 | 0.75 | 0.01119 |
| Crucif. leafy rainfrs (09) | 0.100 | 0. . | 0.00074 |
| Leafy Vegetables (50) | 0.200 | 2.75 | 0.00021 |
| Nuts (101) | 0. . | 0.10 | 0.00031 |
| Pome fruits (126) | 0.200 | 2.75 | 0.00037 |
| Root Crop veg (130) | 0.200 | 11.00 | 0.00299 |
| Seedbed veg (143) | 0. . | 3.55 | 0.01092 |
| Legumes (091) (140) | 0.100 | 0.92 | 0.00267 |
| Sale oil (201) | 0. . | 0.03 | 0.00005 |
| Histac. nuts (211) | 0.200 | 0.03 | 0.00004 |
| Asparagus (07) | 0.200 | 0.14 | 0.00043 |
| Peppers (07) | 0.200 | 1.41 | 0.00426 |
| Olives (102) | 0.100 | 0.06 | 0.00009 |
| Stone fruits (151) | 0.200 | 1.25 | 0.00374 |
| Sugar, cane/beet (154) | 2.000 | 3.64 | 0.10515 |
| Selasses (06) | 20. . | 0.03 | 0.00020 |
| Cranberries (44) | 0.200 | 0. .3 | 0.00009 |
| Cottonseed (oil) (31) | 15.000 | 0.15 | 0.00375 |
| Kidney (203) | 0.500 | 0.03 | 0.00023 |
| Liver (211) | 0.500 | 0.03 | 0.00023 |
| Peanuts (115) | 0.100 | 0.36 | 0.00054 |
| Guava (104) | 0.200 | 0.03 | 0.00009 |
| Papayas (109) | 0.200 | 0. .3 | 0.00009 |
| Mangoes (08) | 0.200 | 0.03 | 0.00009 |

LPI 1.8000 mg/day (60kg) THRC 0.3498 mg/day (1.5kg) % ADI 19.43

Unpublished, Tox Approved: EF2163, 2J29, 905204, 1E2444, 1G2440, 2F2634

| CROP | Tolerance | Food Factor | mg/day (1.5kg) |
|----------------------------|-----------|-------------|----------------|
| Cucurbits (49) | 0.100 | 2.84 | 0.00426 |
| fruiting Vegetables (60) | 0.100 | 2.99 | 0.00440 |
| Small fruit, berries (140) | 0.100 | 0.03 | 0.00124 |
| Nops (73) | 0.100 | 0. .3 | 0.00005 |
| Fish, shellfish (59) | 2.000 | 1.08 | 0.03250 |
| Potable water (193) | 0.500 | 133.33 | 1.00000 |
| Pineapple (123) | 0.100 | 0.30 | 0.00044 |

LPI 1.8000 mg/day (60kg) THRC 1.3923 mg/day (1.5kg) % ADI 77.36

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Current action 794 145310

CROP Tolerance Food factor mg/day (1.5kg)
Tea (162) 4.000 11.7 0.0025

HP1 TDFC 8 ADI
1.8000 mg/day (60kg) 1.3971 mg/day (1.5kg) 77.61
