Monsanto

FROM (NAME & LOCATION) E. S. Tucker - Technology Department - South Second Street

DATE : August 6, 1970

SUBJECT : PCB CONTENT OF CHOCCOLOCCO CREEK FISH

REFERENCE

TO : W. B. Papageorge
General Offices

cc: M. W. Farrar - Res. 1
R. E. Keller - Res. 1
E. P. Wheeler - GO
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During the October 1969 semi-annual survey of the Choccolocco Creek, a number of fish were collected, quick frozen, and shipped to us for PCB residue analysis. The results of our analysis of these samples for PCB's are shown in the table accompanying this memo.

Selected extracts were also submitted for GC/Mass verification of our findings. The results of the GC/Mass analysis are also shown in the table.

A few select extracts, high in PCB's, will also be screened for polychlorinated terphenyls (PCT's) By GC/Mass.

E. S. Tucker

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Attach.

The information contained in this write-up is, to our best knowledge, true and accurate, but all recommendations and suggestions are made without guarantee. Since conditions of use are beyond our control, the Monsanto Company disclaims any liability incurred in connection with the use of these procedures, data or suggestions.

TABLE 1

| Family and Species | Common Name | Number in Composite Sample | ppm PCB's Calculated as Aroclor 1254 Wet Weight | Lipid | % Lipid | OR Log Number |
|---|---|---|---|---|---|---|
| **Choccolocco Creek @ Hwy 78 Bridge (Station #4), ~3 mi. above confluence with Snow Creek** | | | | | | |
| Clupeidae-Herring | | | | | | |
| Dorosoma cepedianum | Gizzard Shad | 4 | 77.7 | 1240 | 6.4 | 252 |
| | | 6 | 29.3 | 798 | 3.7 | 279 |
| Catostomidae-Suckers | | | | | | |
| Hypentelium etowanum | Alabama Hogsucker | 3 | 2.23 | 138 | 1.6 | 275 |
| Cyprinidea-Minnows | | | | | | |
| Notemigonus crysoleucas | Golden Shiner | 1 | 0.45 | 79.4 | 0.6 | 270 |
| Notropis venustus | Blacktail Shiner | 3 | - | 16.5 | - | 269 |
| Centrarchidae-Sunfishes | | | | | | |
| Lepomis cyanellus | Green Sunfish | 5 | 0.45 | 127 | 1.4 | 271 |
| Lepomis macrochirus | Bluegill | 1 | 1.12 | 43.2 | 2.6 | 272 |
| Lepomis macrochirus | Bluegill | 24 | 16.0 | 1170 | 1.4 | 278* |
| Lepomis macrochirus | Bluegill | 2 | 0.28 | 27.9 | 1.0 | 273 |
| Lepomis megalotis | Longear Sunfish | 7 | 61.9 | 4260 | 1.5 | 280* |
| Lepomis microlophus | Redear Sunfish | 2 | - | 308 | - | 266* |
| Lepomis microlophus | Redear Sunfish | 6 | 0.79 | 199 | 0.4 | 277 |
| Microterus salmoides | Largemouth Bass | 4 | 2.73 | 273 | 1.0 | 276 |
| Pomoxis nigromaculatus | Black Crappie | 6 | 3.20 | 361 | 0.9 | 281 |
| | | 2 | 2.44 | 176 | 1.4 | 274 |
| Cattidae-Sculpins | | | | | | |
| Cottus carolinae | Banded Sculpin | 5 | - | 57.5 | - | 265 |
| | Crayfish | 4 | 1 | 1.50 | - | 267 |
| | Snails | 5 | - | 44.4 | - | 268 |
| **Choccolocco Creek @ Hwy 21 Bridge (Station #5) ~1 mi. below confluence with Snow Creek** | | | | | | |
| | Tadpole | 1 | 1 | 9540 | - | 264 |
| **Choccolocco Creek @ Hwy 95 Bridge, ~7-8 mi. below confluence with Snow Creek** | | | | | | |
| Cyprinidae-Minnows | | | | | | |
| Campostoma anomalum | Stoneroller | 3 | 630 | 4520 | 13.9 | 253* |
| Notropis venustus | Blacktail Shiner | 3 | 1097 | 37800 | 2.9 | 254 |

- Continued -

MONS 052204

| Family and Species | Common Name | Number in Composite Sample | ppm PCB's Calculated as Aroclor 1254 Wet Weight | ppm PCB's Calculated as Aroclor 1254 Lipid | % Lipid | OR Log Number |
|---|---|---|---|---|---|---|
| Choccolocco Creek @ Hwy 95 Bridge, ~7-8 mi. below confluence with Snow Creek (continued) | | | | | | |
| Centrarchidae-Sunfishes | | | | | | |
| Chaenobryttus culosus | Warmouth | 1 | 128 | 17590 | 0.7 | 258 |
| Lepomis cyanellus | Green Sunfish | 6 | - | 7970 | - | 259 |
| Micropterus salmoides | Largemouth Bass | 1 | 684 | 9720 | 7.0 | 257 |
| | Frogs | 2 | 323 | 4700 | 0.5 | 260* |
| Choccolocco Creek @ Hwy 109 Bridge, ~15 mi. below confluence with Snow Creek | | | | | | |
| Cyprinidae-Minnows | | | | | | |
| Carassius auratus | Goldfish | 1 | 307 | 4290 | 7.2 | 263 |
| Notemigonus crysoleucas | Golden Shiner | 3 | 170 | 3920 | 4.3 | 262 |
| Notropis venustus | Blacktail Shiner | 4 | 176 | 2390 | 7.3 | 261* |
| Choccolocco Creek @ Hwy 190 Bridge | | | | | | |
| | Snails | 20 | 25.1 | 6610 | 0.4 | 255* |

EST:db
8/6/70

*Analyzed by GC/Mass
PCB's detected in 253, 261, 280
None detected in 260, 266, 278, 255

MDNS 057205