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PRODUCT DEVELOPMENT CALL REPORT

AGRICULTURAL CHEMICALS

Organization Visited: United States Department of Agriculture
Agricultural Research Service
Entomology Research Branch
Kerrville, Texas

Date of Visit: February 21, 1956

Subject: Aroclors as pesticide adjuvants.

Those Present: Rowland Richards
R. C. Bushland
(U. S. Department of Agriculture)

J. M. Magner
(Monsanto Chemical Company)

RECOMMENDATIONS:

The use of Aroclors may be of interest to Organic Division, Agricultural Chemicals formulation section. However, before pesticide formulations containing Aroclors could be sold, it would be necessary to clarify Aroclor residues on plants and animals.

DISCUSSION:

Rowland Richards, Entomologist, from the U. S. Department of Agriculture at the Kerrville, Texas, laboratory presented a paper at the Southwestern Branch meeting of the Entomological Society of America, February 21, entitled: "An Emulsifiable Concentrate for Pyrethrum and Similar Insecticides".

Formulation studies at the Kerrville laboratory had indicated that chlorinated hydrocarbon insecticides contributed to the solubility of emulsifiers in kerosene. For this reason a study was begun using several chlorinated hydrocarbons to improve emulsions containing pyrethrum and kerosene. Among the materials tested were Aroclor 1221, 1232, 1242, and 1248. In these studies all of the Aroclors used gave complete dis-

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persion of the formulation. Further studies showed that a range of 30-50% by weight of the Aroclors gave excellent emulsifying characteristics. In addition to the pyrethrins, it has been found that allethrin and cyclethrin performed satisfactorily in the presence of Aroclor. These formulations have been applied to animals and in preliminary tests there do not appear to be any adverse toxic symptoms to dairy or beef cattle. No masking or extending of insecticidal activity has been noted after the addition of Aroclors. Further studies are planned at Kerrville to determine the safety of such formulations to animals.

J. M. Magner

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