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COLLEGE OF BIOLOGICAL
AND AGRICULTURAL SCIENCES
CITRUS RESEARCH CENTER AND
AGRICULTURAL EXPERIMENT STATION
DEPARTMENT OF ENTOMOLOGY

RIVERSIDE, CALIFORNIA 92502

November 23, 1971

Mr. W. B. Papageorge
Manager, Environmental Protection
Monsanto Company
800 N. Lindbergh Boulevard
St. Louis, Missouri 63166

Dear Mr. Papageorge:

Thank you very much for your letter of 11 November 1971 and the one-gallon sample of Aroclor 1254. Your comments relative to the PCB's and Residue Reviews will be acknowledged in a separate letter.

We are applying the Aroclor 1254 to replicated field plots at 100 p.p.m./3-inch acre of soil. We will follow its persistence (and alteration) by glc-mass spectrometry. We will plant each year and analyze a variety of carrots known to scavenge DDT from soil, alternated with sweet corn. Penetration of this PCB into lower layers of the soil, and movement in runoff waters, will be followed analytically, also. Effects on soil microorganisms will be noted. We anticipate pursuing this project for at least five years, since our laboratory studies have shown no changes at all in Aroclor 1254 in five soil types over one year to date.

We chose this Aroclor because it seems to be the one reported most frequently in "environmental samples." The complexity of the analytical technique, and limited personnel, preclude our adding either Aroclor 1221 or Aroclor 1260 at the present time. In a project to be initiated this winter we will study these three Aroclors in laboratory microsystems as to so-called biological magnification, with insects, aquatic plants, snails, fish, and algae; we already have adequate samples for this small-scale project.

Your comments on this program will be appreciated. Thank you again for your generosity.

Sincerely yours,

F. A. Gunther

F. A. Gunther
Professor of Entomology
and Chemist

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