



המחלקה לחוזי מחקר ולפרויקטים
Office of Research Contracts
and Projects

PD-ABE-872

מכון ויצמן
למדע

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Our Ref. מספרנו

Your Ref. מספרכם

June 8, 1993

Agency for International Development
R & D / R, Room 320 SA-18
Washington, DC 20523-1818
U.S.A.

Dear Sirs,

Re: Grant No. HRN-5544-G-00-2077-00

Please find enclosed the semi-annual scientific report for the project entitled: "Reducing herbicide inputs to reduce costs and to prevent and overcome resistance", submitted by Professor Jonathan Gressel, in cooperation with Professor S. Gawronski, from Warsaw Agricultural University.

The Expenditures Report was forwarded on May 17, 1993.

Sincerely yours,

Ms. Nurit Guter
Acting Director

cc: Scientific Attache at US Embassy in Tel-Aviv
USAID/AmerEmbassy in Warsaw
Center for Development Information and Evaluation (CDIE) i copy
National Academy of Sciences, BOSTID, Washington

Departments of Plant Genetics
and Chemistry
Weizmann Institute of Science
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Weed Science Laboratory
Faculty of Horticulture
Warsaw Agricultural University
Warsaw, Poland

Semi-Annual Progress Report

First Six Months

AID-CDR C12-217

Reducing Herbicide Inputs to Reduce Costs and to Prevent and Overcome Resistance

Despite the late notification of receipt of this grant, the very late signing of the contract and the only recent formalization of the sub-contract with our Polish colleagues, we had begun informally on the research both in Israel and in Poland. Luckily much of the work in Poland is spring and summer field work. Prof. Gawronski has informed me that the preliminary greenhouse experiments have been performed and that the spring weather is such that they are able to put out field plots, which they have been doing for the past few weeks. Results of these experiments will be known in summer and autumn.

Prof. Warshawsky at the Weizmann Institute began syntheses of the first diethyldithio-carbamate derivatives that should traverse the cuticle. The syntheses were complicated because of instability problems, but conditions were finally worked out and the first two compounds were synthesized. The first compound has been bioassayed in the greenhouse, and the first experiment gave somewhat positive results with paraquat. This is presently being rechecked with that herbicide and other herbicides having different kinetics of action, and the second compound will soon be run through the cycle. As soon as we have some comparable results between two

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compounds, Prof. Warshawsky and his colleagues can know which direction to go to further optimize the structure in new syntheses. Our longer first year report should have tables and figures of concrete results.

May 4, 1993



Jonathan Gressel
for all collaborating investigators

Distribution:

- AID Washington (2)
- US Science Attache, Tel Aviv (1)
- AID Representative, Warsaw (1)
- CDIE, Washington (1)
- BOSTID - NAS (2)
- Co-principal investigators/administrators (10)