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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

March 19, 1986

MEMORANDUM

SUBJECT: Data on the Leaching Potential of Paclobutrazol

TO: James Akerman
Deputy Division Director
Registration Division (TS-767C)

THRU: Samuel M. Creeger, Section Chief
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EAB concerns with regard to the potential leaching of paclobutrazol are addressed by new data. I reviewed the "Short Term (30 days) Dissipation and Movement of Paclobutrazol Following Application of PARLAY" Study" that was submitted in response to EAB concerns over potential leaching of Paclobutrazol (PP333) and its degradate (PP333 Ketone). I found that the new data demonstrate that PP333 and its degradate, PP 333 Ketone, did not leach below 6 inches under normal application (2.25 lb a.i./acre) to bare, high sand content soil (see attachment) when the plot received a total of 8.47 inches of water during the 30 day period via rainfall and irrigation. The half life of the combined residues of PP333 plus PP333 Ketone was noted to be 25-32 weeks. It should also be pointed out that aerobic soil degradation study (EAB review of March 15, 1984) indicated that degradation proceeds faster in soils of high organic material content and in addition to PP333 Ketone also results in formation of polar unextractable residues and carbon dioxide and since only extractable material was quantitified in the field study (PP333+PP333 Ketone), carbon dioxide and polar unextractable residues should account for material loss. Leaching is also expected to be even less when used on turf and in soils of high organic material content than observed in a bare soil of high sand content such as used in the study.

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Attachment

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