MEMORANDUM

SUBJECT: EPA Nos. 100-439, 100-497, 100-535, 100-585: Atrazine on Conifers. Amended Registration to Alter Grazing Restrictions. No Accession Number. RCB Nos. 88, 89, 90, and 91.

FROM: Lynn M. Bradley, Chemist Hazard Evaluation Division (TS-769C)

TO: Robert Taylor, PM 25 Fungicide-Herbicide Branch Registration Division (TS-767C)

THRU: A. R. Rathman, Section Head Hazard Evaluation Division (TS-769C)

Ciba-Geigy, Agricultural Division, has modified its earlier request for an amended registration to permit the grazing of livestock in areas of the Pacific Northwest of conifer reforestation treated with its herbicide Aatrex® (atrazine). Aatrex is registered for use on conifers at 2 to 4 lb ai/A. The current label does not permit the grazing of livestock in treated forest areas.

Atrazine is registered for use on rangeland at 1-2 lb ai/A. A tolerance of 4 ppm is established for atrazine and metabolites on rangeland grass (40 CFR 180.220). The label for rangeland usage requires a 3 month grazing restriction after spring application and a 7 month restriction after fall application.

RCB has reviewed this request several times previously. In 1980 (L. Bradley, September 19, 1980), Ciba-Geigy requested a 6 month grazing restriction and we requested additional residue data. Additional residue data were submitted and
that time, the request was to permit grazing at 7 months after fall application or 3 months after winter or spring application. We were concerned about use in arid areas which are geographically in the Pacific Northwest, and requested more information about rainfall data for the studies which had been submitted and clarification of where the proposed grazing was intended. Our August 15, 1985 review (J. Garbus) attempted to clarify these concerns. Now, Ciba-Geigy proposes to keep the grazing prohibition east of the Rockies (arid areas) and impose a 6-month grazing restriction in high rainfall areas. (Letter of T. Parshley to R. Taylor PM-25, October 14, 1985.)

Our concerns about the residue studies being representative of rainfall patterns in the area where livestock will be grazed would be eliminated by the continued grazing prohibition east of the Cascade Mountain range. There is considerable arid land (the Great Basin) between the Cascades and the Rockies, particularly in Oregon. If the intent is to include the wetter western slopes of the Rockies, Ciba-Geigy will need to reword the restriction; otherwise, "the Cascades" may be substituted for "the Rockies."

Moreover, the 6-month grazing restriction is not sufficient to ensure that atrazine residues will decline to below the 4 ppm tolerance level in grass. As discussed in our September 7, 1984 review, the Oregon residue study showed 5.6 ppm atrazine plus metabolites at 6 months; residues were well below the tolerance level at 7 months. This study received a late fall treatment at the maximum rate. It will be necessary to retain the grazing restriction which was proposed in 1984, the same as for rangeland grass: 7 months after fall application or 3 months after spring application. (Because of the growing conifers, a hay-cutting restriction will not be necessary.)

Conclusions and Recommendations

Our earlier concern that the residue data are actually representative of the area where grazing is to occur is not yet satisfied. The geographic restriction against grazing livestock in treated arid areas east of the Rockies does not exclude the arid areas between the Cascades and the Rockies. Ciba-Geigy will need either to substitute "Cascades" for "Rockies" in the restriction, or craft some other language to include the western slopes of the Rockies but exclude the Great Basin arid area.
The 6-month grazing restriction west of the Rockies is inadequate to ensure that livestock will not consume over-tolerance residues. Ciba-Geigy will need to impose a variable restriction depending on time of application 7 months after fall or 3 months after spring application, as was proposed in 1984. This is the same restriction as for rangeland grass.

For a favorable recommendation, Ciba-Geigy needs to submit labeling which includes a clear definition of the areas where grazing is acceptable (high rainfall) and the variable time restriction, depending on application time.

cc: Amended use file, Atrazine S.F., LMB, PM-25
    PMSD/ISB, R.F., Circ., J. Garbus.

TS-769:L.M.Bradley:12/22/85
RDI:ARR:12/23/85;RDS:12/23/85