125601
SHAUGHNESSEY NO.

6
REVIEW

EEB BRANCH REVIEW

DATE: IN 5/6/85 OUT 5/31/85

FILE OR REG. NO. 538-ROI, 538-ROI

PETITION OR EXP. PERMIT NO.

DATE OF SUBMISSION 2/14/85

DATE RECEIVED BY HED 5/3/85

RD REQUESTED COMPLETION DATE 6/3/85

EEB ESTIMATED COMPLETION DATE 6/1/85

RD ACTION CODE/TYPE OF REVIEW 160

TYPE OF PRODUCT(S): I, D, H, F, N, R, S Plant Growth Regulator

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. R. Taylor (25)

PRODUCT NAME(S) Pro Turf Turf Growth Regulator Plus Fertilizer Sand Soils

COMPANY NAME O. M. Scott & Sons Company

SUBMISSION PURPOSE Proposed full registration of new turf use (golf courses)

SHAUGHNESSEY NO.	CHEMICAL, & FORMULATION	% A.I.
125601	Paclobutrazol	1.38%
		[redacted]

INFORMATION WHICH MAY REVEAL AN UNREGISTERED FORMULATION IS NOT INCLUDED

ECOLOGICAL EFFECTS BRANCH REVIEW

PACLOBUTRAZOL

100 Submission Purpose and Label Information

100.1 Submission Purpose and Pesticide Use

To evaluate: slowed vertical growth and reduced mowing up to eight weeks on hybrid bermudagrass fairways, tees, and St. Augustinegrass turf areas; better ball playability due to increased turf density and a tighter knit turf; improved and extended fertilizer performance for up to 12 weeks while improving turfgrass quality versus fertilizer alone.

100.2 Formulation Information (2 products with different % a.i.)

1. Active Ingredient =
Paclobutrazol = (2RS, 3RS)-1-(4-chlorophenyl)-4, 4-dimethyl-2-(1, 2, 4-triazol-1-yl)-pentan-3-ol....1.38%
Inert Ingredients:.....98.62%

[redacted]

100.3 Application Methods, Directions, Rates

Apply to dry foliage at spreader application rate of 10 3/16 lbs/16,500 ft^2. Water in after treatment. Repeat applications within the same growing season may be made, but no sooner than 8 weeks following the initial application.

100.4 Target Organism

Hybrid bermudagrass and St. Augustinegrass turf

100.5 Precautionary Labeling

Environmental Hazards: Do not apply directly to water. Do not apply to steep slopes or when weather conditions favor drift or runoff from target areas. Do not contaminate water by cleaning of equipment or disposal of waste.

101 Hazard Assessment

101.1 Discussion

EEB has reviewed submission for registration on ornamental trees, greenhouse plants, and turf uses previously. The reviews indicate minimal hazard to wildlife and fish. This submission proposes the application method is to water thoroughly after treatment and to use on sandy soils. Leaching for paclobutrazol is expected in sandy soils. (Report No. RJ0244B, I. R. Hill and S. Praghad, 1982).

101.2 Likelihood of Adverse Effects to Nontarget Organisms

The bird, fish, and aquatic invertebrates data indicate paclobutrazol is "practically nontoxic".

The exposure to nontargets, other than those feeding directly on the golf course turf, is expected to be minimal, because of the application method. Because of the minimum exposure potential posed under this incremental risk assessment, and due to the relatively low toxicity of paclobutrazol to fish, birds, and aquatic invertebrates, EEB does not expect unreasonable adverse effects to nontarget organisms.

101.3 Endangered Species Considerations

Minimal hazard is expected for endangered species at this time.

101.4 Adequacy of Toxicity Data

The six basic studies are valid. No further studies are necessary for this use.

101.5 Adequacy of Labeling

The submitted labeling should add the following statement:

"Do not apply directly to wetlands."

102 Classification

This is an amendment to an existing no restrictive use label.

103 Conclusion

EEB has completed an incremental risk assessment (3(c)(7) Finding) of the proposed conditional registration of Pro Turf Turf Growth Regulator Plus Fertilizer Sand Soils for use on golf courses. Based upon the available data EEB concludes that the proposed uses provide for no significant increase in hazards to non-target organisms.

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