



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

JAN 10 1989

OFFICE OF
PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

Subject: The use of grass seed screenings in animal feed.

To: Chuck Trichilo, Chief
Residue Chemistry Branch

From: Joseph A. Ferrante, Economist
Biological and Economic Analysis Division

Thru: Allen L. Jennings, Director
Biological and Economic Analysis Division

Introduction

We have completed a market analysis of grass seed production in the Pacific Northwest (Washington, Idaho, Oregon). This analysis also includes a discussion of the market for straw and screenings/chaff which are byproducts of grass seed farming and processing.

Grass seeds are harvested by shaving off the top part of mature grass (ie. grass that has been allowed to flower and produce seeds). The bottom part of the plant is mowed and collected for straw. After the straw is harvested, the remaining stubble is burned in the field or plowed under (note: grass field fires have been banned in Oregon).

Grass seeds are cleaned and processed by removing the screening/chaff from the top portion of the plant. The screenings (which are comprised of parts such as the husk, hull, and awns) are pelletized to produce animal feed.

The remainder of this memo briefly presents our findings from an analysis of the market for grass seed and grass seed byproducts. We will also present the extent to which grass seed screenings are used in the animal feed market. This information should be useful in deciding whether or not tolerances need to be established for pesticides used on grass seed crops.

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Findings

- o There are 350,000 - 400,000 acres producing grass seed in the Pacific Northwest.
- o This acreage yields 330 - 350 million pounds of grass seed.
- o The Pacific Northwest accounts for 60 - 70 percent of the national grass seed production.
- o The price of grass seed ranges from \$.40 per pound for low quality grass (eg. rye grass) to \$1.60 per pound for high quality grass (eg. Kentucky bluegrass).
- o Gross revenue for grass seed in the Pacific Northwest, excluding the sale of byproducts, is between \$150 - \$200 million.
- o Profits vary according to the variety of grass seed produced. The per acre profits for Kentucky bluegrass (a high quality grass) are about \$500 - \$600.
- o Approximately 70 - 100 million pounds of screenings are produced during grass seed processing.
- o Almost all of the screenings (99 percent) are pelletized for cattle feed. The remaining 1 percent is used as mulch.
- o The price of screenings is based on the market price for barley and fluctuates accordingly. Typically screenings sell for \$35 - \$75 per ton.
- o Therefore gross revenues for grass seed screenings are \$1.2 - \$3.8 million in the Pacific Northwest.
- o Cattle eat approximately 13.5 billion pounds of feed annually in the Pacific Northwest. The feed is mainly comprised of corn, sorghum, and oats.
- o Most grass seed screenings are consumed by cattle in Oregon, Washington, and Idaho. These screenings account for less than 1 percent of the total (annual) cattle feed market in this area.

If you need any more information regarding the production of grass seeds, grass seed screenings, and the relative importance of its use in the animal feed market please do not hesitate to contact me at 557-1753.

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