

US EPA ARCHIVE DOCUMENT

APR -3 1997

Small Grains
128959

MEMORANDUM

SUBJECT: Review of Emergency Exemption Request from Montana to use Fluroxypyr to Control Sulfonylurea- and Dicamba-Resistant Kochia in Wheat (97-MT-04)

FROM: Dennis Szuhay, Chief
Plant Sciences Section
Biological Analysis Branch/BEAD (7503W)

THRU: Allen L. Jennings, Director *Original signed by Allen L. Jennings*
Biological and Economic Analysis Division (7503W)

TO: Pat Cimino/Rob Forrest
Registration Support Branch/RD (7505W)

Introduction:

I have reviewed the emergency exemption request from Montana to use fluroxypyr to control sulfonylurea- (SU) and dicamba-resistant kochia in wheat. I conclude that a non-routine situation does not exist, and, hence, an economic analysis is not warranted.

Biological Aspects:

According to the petition, wheat acreage in Montana is being increasingly infested with SU- and dicamba-resistant kochia. The SU-resistant kochia is reported to be wide spread (Dyer, 1997), while the more recent dicamba resistance is still only at very minor levels (Jachetta, 1997). Still, the growers have been somewhat successful at controlling these resistant kochia populations with bromoxynil and dicamba, although the application window is relatively narrow for each chemical. Thus, this situation can only be described as being routine.

The state also claims that this lack of a wide variety of effective and registered herbicides for kochia control in wheat has permitted kochia populations to reach levels of competition with the crop so that economically significant reductions in yield are occurring, especially in those limited areas where dicamba resistance also exists. Unfortunately, current Section 18 policy does not consider such losses to be non-routine and, hence, of an emergency nature. *CONCURRENCES* as viable alternative

①

SYMBOL	control measures exist.					
SURNAME	<i>Szuhay</i>					
DATE	<i>3-31-97</i>					

REFERENCES

Dyer, William. 1997. Associate Professor of plant physiology and molecular biology at Montana State University at ph. 406-994-5063. Personal communication with D. Szuhay on 3-21-97.

Jachetta, John. 1997. Representative for DowElanco - the Manufacturer of the chemical. Personal communication with D. Szuhay on 3-25-97.

3-20-97 call to Bill Dyer at MSU
406-994-5063 (no voice mail); Secty-4601 --left msg 1:55
11:15 on 3-21-97

RE: fluroxypyr Sec 18 on wheat to control resistant kochia

3-21-97 ca. 1 PM

-He doesn't have much field experience w/ fluroxypyr, as he's a plant physiologist and does a lot of lab work

-He's not sure if it's an imidazolinone, and, hence, an ALS inhibitor

-He feels that SU resistance is state-wide, but the more recent dicamba resistance (1993-94?) is just getting started

-state is asking to treat 100,000 of the ca. 2.5 million acres of spring wheat

-any sampling or monitoring for dicamba resistance is likely to be done by BASF; sandoz sold dicamba to BASF as a part of the agreement when they merged w/ CIBA to become Novartis

-at seedling stage, 50 to 200 kochia plants/sq m. is not uncommon; if uncontrolled, they will thin out to 10 thin, lanky plants /sq m

-serious losses accompany the harvesting of the tall, yet green kochia plants with the grain

-hot & dry conditions are good for kochia development - a thick cuticle develops that thwarts herbicides; more succulent plants develop when its cool and wet

-fluroxypyr rep at Dowelanco = Mary ?

-Celestine Duncan is a MT crop consultant & good friend of Mary, and can provide Mary's name and phone #, as well as better info on resistant weed distributions.

⑤

1:45 call to Celestine Duncan on 3-21-97 at 406-443-1469

-she doesn't think it is an imidazoninone; works more like a PGR

-Mary Halstvedt is still the local Technical Service Rep for Dowelanco and can be reached at 970-586-6964

4

Mary Halstvedt --left message on 3-21-97
--on 3-24-97, her voice mail message said that she's out till
Thurs, 3-27-97

⑤

11:20 on 3-25-97 I received a call from John Jachetta from
Dowelanco ph - 317-337-4672 email - jjjachetta@dowelanco.com

--fluroxypyr is a pyridine like triclopyr, not an imidazolinone,
and hence, is a good tool for resistance management of SU
resistant weeds.

--the dicamba resistance is "only at very minor levels" at this
point in time, i.e. only of concern to researchers

--he has no kochia competition data for small grains, but knows
that it has a high impact on yields, and does not take many
plants to have an effect. also the concern for weed seed
reservoir

6