



\*Trademark of Dow AgroSciences LLC

# Fact Sheet

## Management of late blight tuber rot

### Advantages:

- Excellent control of late blight and early blight
- Outstanding rainfastness
- New mode of action for resistance management
- Cost effective--less than \$10 /acre
- **Reduces late blight tuber rot**



### Tuber rot Management:

- Data from trials conducted in 2000, 2001 and 2002 at North Dakota State University have demonstrated that 3-5 applications of Gavel\* fungicide applied at intervals appropriate for disease pressure and environmental conditions provided reduced late blight tuber rot infection levels compared to standard treatments. Applications of Gavel arrest the development of the highly mobile zoospores that often cause infection of tubers as a result of movement from the canopy through the soil and to the tuber.

### Mixing and application:

- Apply 1.5-2 lbs. per acre depending on vine development (**2 lbs. per acre after row closure**)
- Use a 5 - 7 day treatment interval when late blight is present and conditions favor disease development. Intervals can be lengthened to 7 - 10 day intervals when disease pressure is low and environmental conditions are unfavorable for disease development.
- Use of adjuvant is not required, but may be used, if desired (tank mix partners may require)
- Apply in adequate carrier to achieve thorough, uniform coverage of the entire crop canopy
- Center pivot chemigation applications should apply maximum of ¼ inch water per acre
- Consult label for complete information on recommended rates and treatment intervals

### Fungicide components:

- Zoxamide - 8.3% and Mancozeb - 66.7%. 75% dry flowable formulation

### Other information:

- Personal Protective Equipment: Long-sleeved shirt and long pants, chemical resistant gloves, shoes plus socks. Mixers and loaders must also wear chemical resistant apron.
- Restricted Entry Interval: 48 hours
- Observe seasonal use limits (consult label for additional information)
- Pre harvest Interval: 3 days (CT, DE, FL, ME, MA, MI, NH, OH, PA, RI, VT, WI); and 14 days elsewhere
- Re-cropping interval: 0 days for Gavel registered crops; 30 days for all other crops

This fact sheet is not a substitute for the product label.

# Tuber Rot Trials

## NDSU – 2000, 2001 & 2002

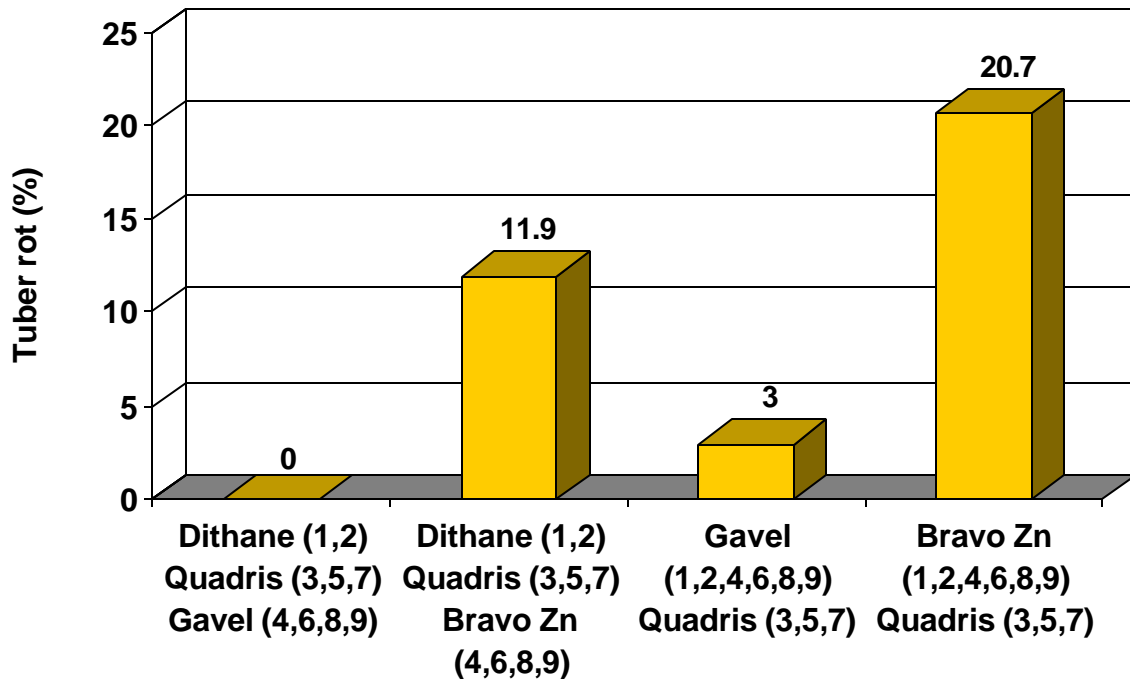
### Secor & Gudmestad

Treatments, Rates, Schedules								
2000			2001			2002		
Treatment	Rate (prod/a)	Schedule	Treatment	Rate (prod/a)	Schedule	Treatment	Rate (prod/a)	Schedule
Dithane* RS fungicide Quadris Gavel	2.0 lb 6.2 fl oz 2.0 lb	1,2 3,5,7 4,6,8,9	Dithane RS Quadris Gavel	2.0 lb 6.2 fl oz 2.0 lb	1,2,4 3,5 6,7,8	Bravo WS Gavel Dithane RS	1.5 pt 2 lb 2 lb	1,2 3,5,7 4,6,8
Dithane RS Quadris Bravo ZN	2.0 lb 6.2 fl oz 2.125 pt	1,2 3,5,7 4,6,8,9	Dithane RS Quadris Gavel	2.0 lb 6.2 fl oz 2.0 lb	1,2,4 3 5,6,7,8	Dithane RS Quadris Gavel	2 lb 6.2 fl oz 2 lb	1,2 3,5 4,6,7,8
Gavel Quadris	2.0 lb 6.2 fl oz	1,2,4,6,8,9 3,5,7	Dithane RS Quadris Gavel	2.0 lb 6.2 fl oz 2.0 lb	1,2 3 4,5,6,7,8	Dithane RS Headline Gavel	2 lb 6.2 oz 2 lb	1,2 3,5 4,6,7,8
Bravo Zn Quadris	2.125 pt 6.2 fl oz	1,2,4,6,8,9 3,5,7	Dithane RS Quadris Bravo Zn	2.0 lb 6.2 fl oz 2.125 pt	1,2 3 4,5,6,7,8	Bravo WS Quadris	1.5 pt 6.2 fl oz	1,2,4,6,7,8 3,5
			Dithane RS Quadris Omega	2.0 lb 6.2 fl oz 1.0 pt	1,2,4,6 3,5 7,8			

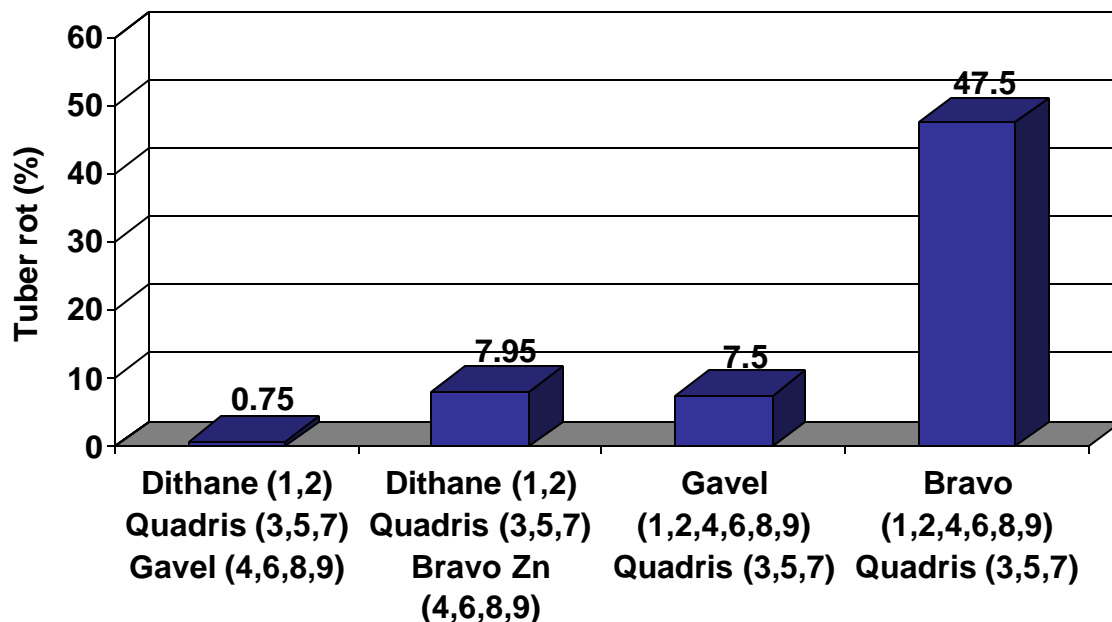
Application Dates				Planting, Inoculation, Harvest			
Application No.	2000	2001	2002		2000	2001	2002
1	July 9	July 11	July 13	Variety	Red LaSoda	Red LaSoda	Red LaSoda
2	July 13	July 20	July 18	Planting	May 25	June 4	May 25
3	July 20	July 26	July 26	Inoculation	July 18	July 25	July 22
4	July 27	August 2	August 2	Late blight ID	August 15	August 2	August 24
5	August 3	August 10	August 9	Vine kill	September 15	September 14	September 12 & 18
6	August 10	August 16	August 16	Harvest	October 3	September 27	October 2
7	August 17	August 23	August 22	Tuber Evaluation (days after harvest)	3 DAH 20 DAH	33 DAH 90 DAH	27 DAH 78 DAH
8	August 24	August 30	August 29				
9	August 31						

## Results of Tuber Evaluations-2000

*Late blight tuber infection in a fungicide demonstration trial three days after harvest (10/6/2000) at Prosper, ND. Secor & Gudmestad, NDSU*

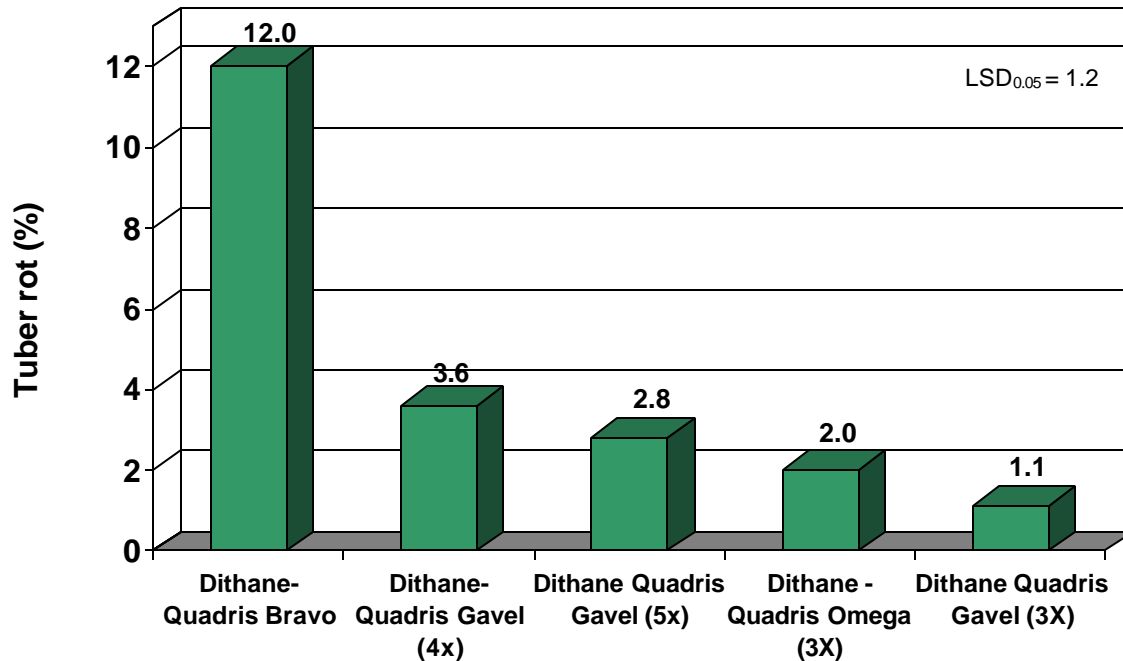


*Late blight tuber infection in a fungicide demonstration trial twenty days after harvest (10/26/2000) at Prosper, ND. Secor & Gudmestad, NDSU*

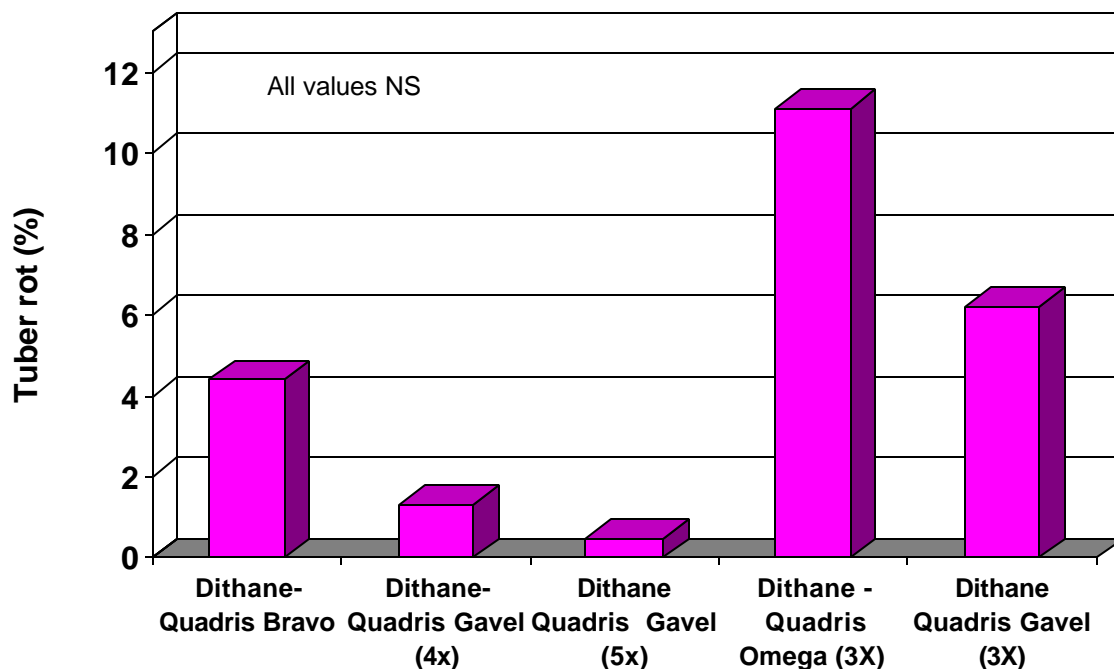


## Results of Tuber Evaluations – 2001

*Late blight tuber infection in a fungicide demonstration trial 33 days after harvest at Prosper, ND 2001. Secor & Gudmestad, NDSU*

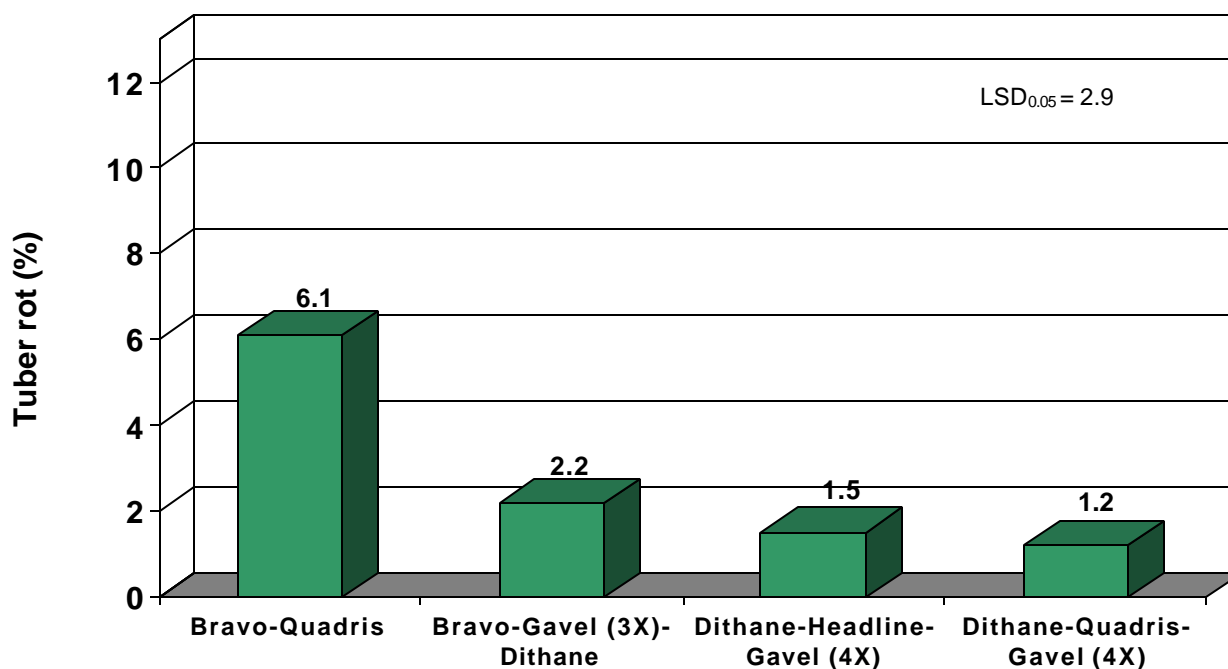


*Late blight tuber infection in a fungicide demonstration trial 90 days after harvest at Prosper, ND 2001. Secor & Gudmestad, NDSU*

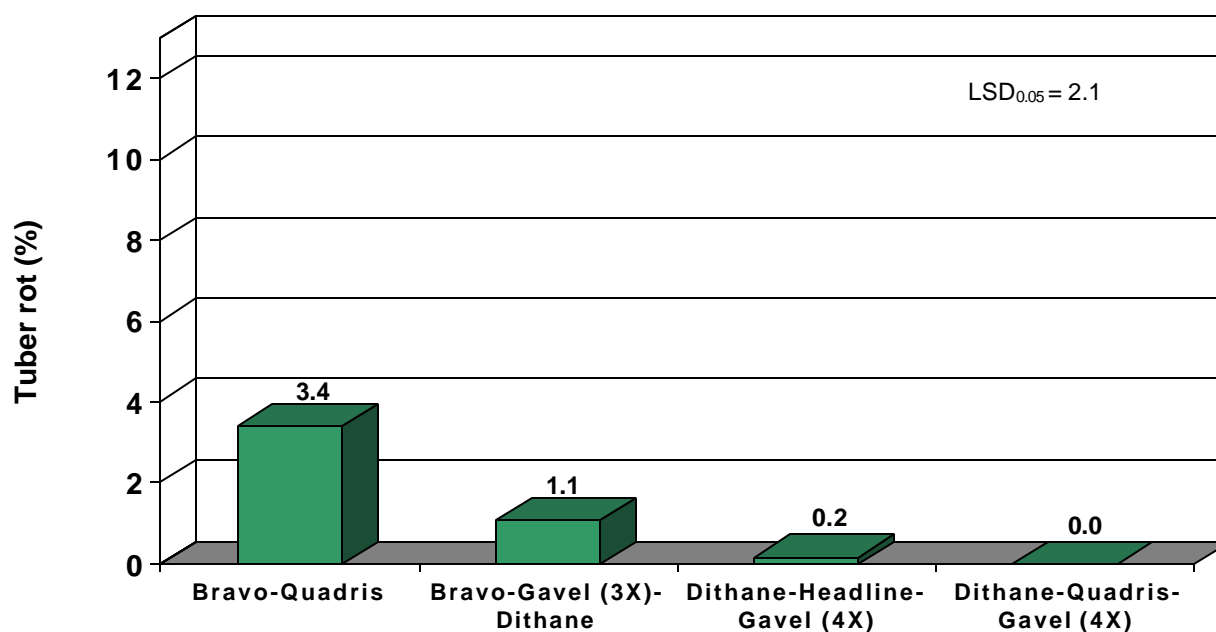


## Results of Tuber Evaluations – 2002

*Late blight tuber infection in a fungicide demonstration trial 27 days after harvest. Prosper, ND 2002. Secor & Gudmestad, NDSU*



*Late blight tuber infection in a fungicide demonstration trial 78 days after harvest. Prosper, ND 2002. Secor & Gudmestad, NDSU*



# Product Bulletin

Rohm and Haas Company 100 Independence Mall West Philadelphia, PA 19106

## Gavel<sup>®</sup> 75DF Fungicide

EPA Reg. No. 707-274

2(ee) Recommendation <sup>†</sup>

For Distribution and Use only in the States of Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nebraska, New Hampshire, New Jersey, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia, Washington, West Virginia and Wisconsin

### For Management of Late Blight Tuber Rot

#### ATTENTION

- <sup>†</sup> This recommendation is permitted under FIFRA 2(ee) and has not been submitted to or approved by the EPA or state lead pesticide agency.
- Read and follow all applicable directions for use, precautions and limitations on the product label attached to the product container for Gavel 75DF fungicide.

When used as part of an integrated late blight management program, according to label instructions, and in conjunction with a sound tuber storage program, Gavel<sup>®</sup> 75DF fungicide can reduce late blight tuber rot incidence in potatoes.

To maximize activity against tuber blight caused by *Phytophthora infestans*, begin applications when conditions favor late blight disease development and in accordance with local late blight advisory recommendations. Continue to make regular applications with Gavel 75DF while these conditions persist and ensure thorough foliar coverage.

Consult the label for Gavel 75DF for recommended treatment schedules and the appropriate pre harvest intervals.

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