

Fiddleneck control in barley, untreated strip shown between treated areas

What is BUCTRIL?

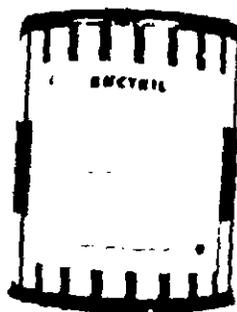
Buctril is a selective broadleaf herbicide for early post-emergence weed control in fall or spring-planted wheat and barley.

Buctril is an emulsifiable liquid concentrate which contains 2 pounds of active ingredient (Bromoxynil) per gallon in the form of Bromoxynil octanoate.

Buctril is a contact weed killer... not a hormone. It does not have the volatility of hormones.

BUCTRIL

PRODUCT NUMBER 156



PACKED IN
5 GALLON DRUMS

ACCEPTED

JUN 26 1967

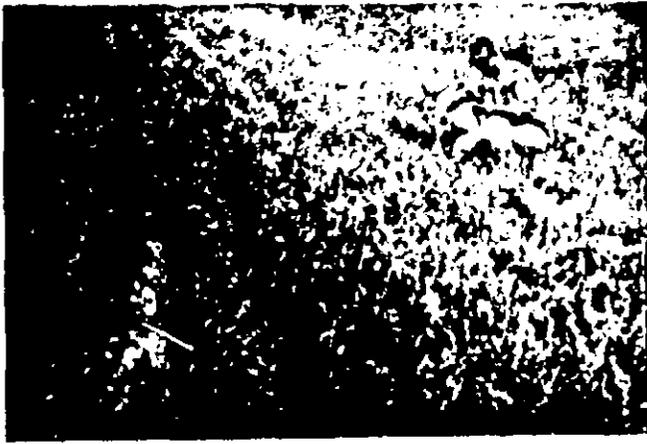
UNDER THE FEDERAL INSECTICIDE
AND RODENTICIDE ACT
FOR FEDERAL PERSON REGISTER.
ED UNDER NO. 25. SUBJECT
TO ATTACHED COMMENTS.



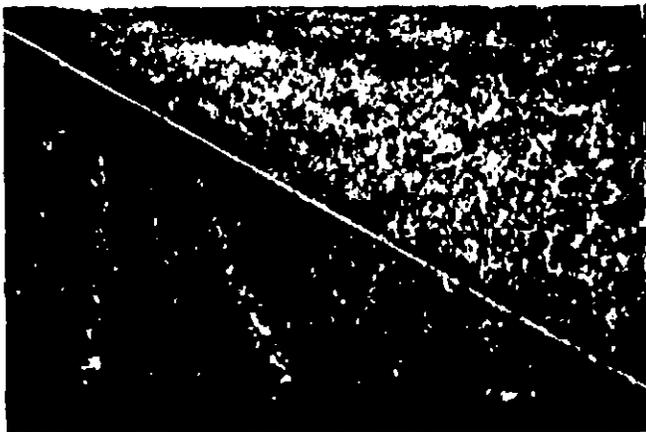
CHIPMAN CHEMICAL CO., INC.
RURLINGAME, CALIFORNIA

REGISTERED UNDER THE FEDERAL INSECTICIDE AND RODENTICIDE ACT
FOR FEDERAL PERSON REGISTER. ED UNDER NO. 25. SUBJECT TO ATTACHED COMMENTS.

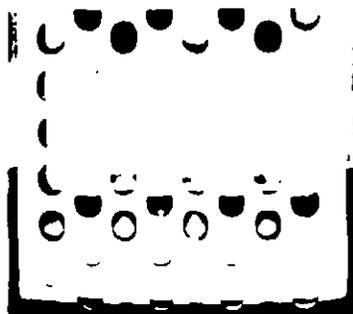
PICTURE-PROOF OF GOOD WEED CONTROL IN WHEAT



Buctril tarweed control on left, right untreated



Tarweed untreated on right, Buctril control on left



BUCTRIL Facts and Adv

- 1 Buctril should be applied soon after weeds emerge, when they are in the seedling stage and before they are shaded by the crop.
- 2 Buctril controls weeds in the seedling stage of growth, thereby eliminating the competition for plant food and moisture.
- 3 Buctril can be applied as early as the 2-leaf stage of wheat or barley without injury to the crop.
- 4 Buctril has increased yields 10 to 15 bushels per acre when applied to seedling weeds. 2,4-D would injure the crop at this stage and reduce yields.
- 5 Buctril is not a hormone and does not have the volatility of hormones to endanger nearby crops.
- 6 Buctril acts by requires sufficient distribution and coverage of the product (minimum of 25 gallons per acre by ground equipment or 10 gallons by airplane).
- 7 Buctril contains additional wetting agents not required and is not detrimental.
- 8 Buctril does not leave residues on the soil when used.
- 9 Buctril is non-toxic and will not contaminate food crops when recommended and cleaning procedures are observed.
- 10 Buctril controls tarweed, fiddleneck, wild buckwheat, and other weeds are not controlled with other herbicides.

Increases Yields 10 to 15 Bushels per Acre



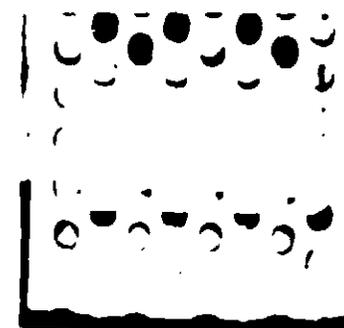
These Tables Show Results That Pay!

Economic data based on tarweed (14-inch precipitation)
control trials established in Gaines wheat in 1965.

(Ray Meyer, Whitman County Agent, Colfax, Wash.)

TREATMENT	Rate Lb./A	Date of Application	Weed Control (%)	Yield Bu./A	Value/A (\$)	Gross Value over Check	Net Value over Check
Check			0	35	43.75		
Hand-weeded		3/19 65	95	71	88.75	45.00	—\$
2,4-D	1	3/19 65	75	57	71.25	27.50	26.00 (B)
2,4-D	1	4/26 65	50	47	58.75	15.00	13.50
Buctril	1/2	4/26 65	95	71	88.75	45.00	37.70 (C)

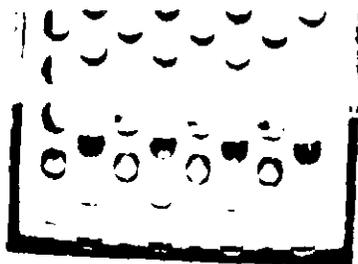
(A) Wheat at \$1.25 per bushel.



- (B) Cost of material and application at \$1.50 per acre.
- (C) Cost of material and application at \$7.30 per acre.
- (D) Control of weeds initially much higher but late germinating weeds lowered final ratings.

**Fiddleneck control and yield in Mariot barley.
Applied 1/28/65 at Corcoran, Calif.**

CHEMICAL	Rate Lb./A	Rate Pts./A	Control 2/4/65 (%)	Weeds per 4 Sq. Ft. 3/4/65	YIELD	
					Lbs./A	% Check
Buctril	3/8	1 1/2	75	1.5	4748	120
Buctril	1/2	2	93	0.5	4400	111
MCP	1/2	2	13	148	3947	100
2,4-D	1/2	1	20	78	3690	93
Check		0	—	116	3948	—



PRODUCT NO.

156

NET C

5

BUCTRIL[®]

For the control of certain broadleaf weeds in wheat and barley.

ACTIVE INGREDIENT

Octanoic acid ester of bromoxynil* (3,5-dibromo-4-hydroxybenzotrile) 33.9%

INERT INGREDIENTS 66.1%

*Bromoxynil octanoate equivalent to 23.31% of bromoxynil or not less than 2.0 pounds of bromoxynil per gallon

CAUTION: Keep Out of Reach of Children

Do not take internally. Avoid contact with skin, eyes or clothing. In case of contact, flush eyes with plenty of water, get medical attention. Wash skin with soap and water.

Avoid breathing spray mist.

Avoid spray drift onto neighboring crops and pastures. Do not store near seeds, fertilizers, insecticides or fungicides. Do not re-use shipping containers, destroy by crushing and burying where possible. Avoid contamination of water intended for irrigation or domestic purposes.

Contamination of water with this chemical may kill fish. Rinse spray equipment and containers and dispose of liquid wastes in a pit in non-crop lands located away from water supply.

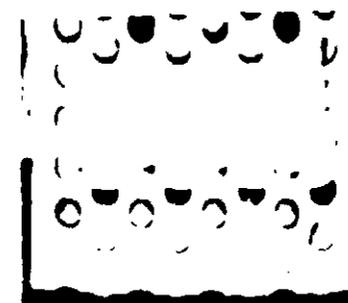
DIRECTIONS

IMPORTANT: Spray weeds soon after emergence for good weed control and to prevent competition to the crop.

WHEN TO APPLY: Make application before the crop has reached the boot stage. It is important that weeds are sprayed soon after they have emerged when they are still seedlings and before they become shaded by the crop.

CONTROL THESE WEEDS IN THE SEEDLING ST.

- Blue (Purple) Mustard (*Chorispora tenella*)
- Corn Chamomile (Mayweed) (*Anthemis arvensis*)
- Corn Chamomile (Dogfennel) (*Anthemis cotula*)
- Corn Gromwell (*Lithospermum arvense*)
- *Cow Cackle (*Saponaria vaccaria*)
- Fiddleneck (Tarweed) (*Amsinckia inermis*)
- Field Pennycress (*Thlaspi arvense*)
- Green Smartweed (*Polygonum scrubrum*)
- *Groundsel (*Senecio vulgaris*)
- *Henbit (Dead Nettle) (*Lamium amplexicaule*)
- Knawel (*Schleranthus annus*)
- Lambsquarters (*Chenopodium album*)
- *London Rocket (*Sisymbrium irio*)
- Peppergrass or Pepperweed (*Lepidium spp*)
- Shepherdspurse (*Capsella bursa-pastoris*)
- Silverleaf Nightshade (*Solanum elaeagnifolium*)
- Tartary Buckwheat (*Fagopyrum tataricum*)
- Tarweed (*Hemizonia spp*)
- *Tumble (Jim Hill) Mustard (*Sisymbrium altissimum*)
- Wild Buckwheat (*Polygonum convolvulus*)
- *Wild Mustard (*Brassica kaber*)
- *Less susceptible weed.



Do not apply when plants are stressed from lack of moisture.

AMOUNT TO USE: Use 1 1/2 pints per acre for the more susceptible weeds. For the less susceptible weeds marked * in the list, use 2 pints per acre.

HOW TO APPLY: Apply as a water mixture. BUCTRIL is a contact weed killer and good coverage of the weeds is essential.

FOR GROUND APPLICATION EQUIPMENT: Apply in a minimum of 25 gallons total spray per acre. Use a higher gallonage if necessary to get good coverage. Nozzle pressure should be at least 20 p.s.i.

FOR AERIAL APPLICATION: Apply in a minimum of 10 gallons of total spray per acre. The plane should fly at a height above the crop to insure good coverage of weeds. Width of swath flown must not exceed length of spray boom.

Local conditions may affect the use of this chemical. Consult Structural Extension or Experiment Station weed specialists for specific recommendations for local weed problems.

Seller makes no warranty of any kind, express or implied, concerning results of use of this product. Buyer assumes all risk of use, whether in accordance with directions or not.

Do NOT Store with Foodstuffs

U.S.D.A. Reg. No. 359-554

* Trademark of Rhodia, Inc.

Code: 801

Controls These Tough Weeds in The Seedling

FIDDLENECK (TARWEED) • PURPLE MUSTARD • GROMWELL • WILD BUCKWHEAT • MA

These weeds are controlled when Buctril is applied at 1 1/2 pints per acre soon after weeds emerge and before they are shaded by the crop.

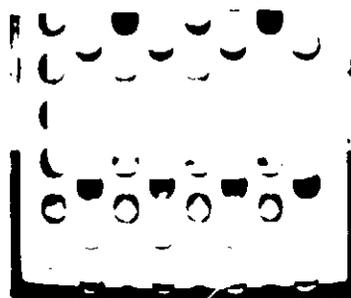
Purple Mustard	Shepherds Purse
Fiddleneck (Tarweed)	Silver Nightshade
Corn Gromwell	Tartary Buckwheat
Field Pennycress	Tarweed
Green Smartweed	Lambsquarters
Dogfennel	Wild Buckwheat
Knawel	Peppergrass

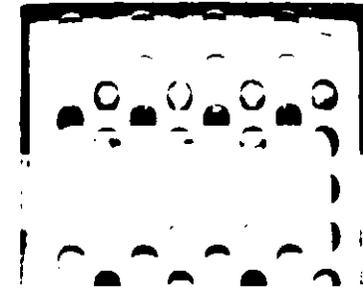
Less susceptible weeds which require 2 pints of Buctril in the seedling stage are:

Cow Cockle
Groundsel
Tumble Mustard
Wild Mustard
London Rocket
Henbit

Limited field tests and field experience indicate that the following weeds may be controlled after emergence with 1 1/2 to 2 pints per acre.

Ball Mustard	Ca
Tansy Mustard	Wi
Sunflower	An
Hedge Mustard	Go
Ragweed	An





CONTENTS
GALLONS

AGE

SEEDLING WEEDS MUST BE SPRAYED SOON AFTER THEY EMERGE



WILD BUCKWHEAT

Spray 1 1/2 pints per acre at
2 to 4 leaf stage



TARTARY BUCKWHEAT

Spray 1 1/2 pints per acre at
2 to 4 leaf stage



FIELD PENNYCRESS

Spray 1 1/2 pints per acre at
2 to 4 leaf stage



SHEPHERDS PURSE

Spray 1 1/2 pints per acre at
2 to 6 leaf stage





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Stage NY OTHERS

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controlled soon
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chfly
id Radish
ual Sow Thistle
osefoot
ual Morning
glory

FIDDLENECK (Tarweed)

Spray 1 1/2 pints per acre at 2 to 6 leaf stage

GROUNDSEL

Spray 2 pints per acre at 2 to 4 leaf stage

WILD RADISH

Spray 1 1/2 pints per acre at 2 to 4 leaf stage

LAMBSQUARTERS

Spray 1 1/2 pints per acre at 2 to 6 leaf stage



CORN GROMWELL

Spray 1 1/2 pints per acre at 2 to 6 leaf stage



WILD MUSTARD

Spray 2 pints per acre at 2 to 4 leaf stage



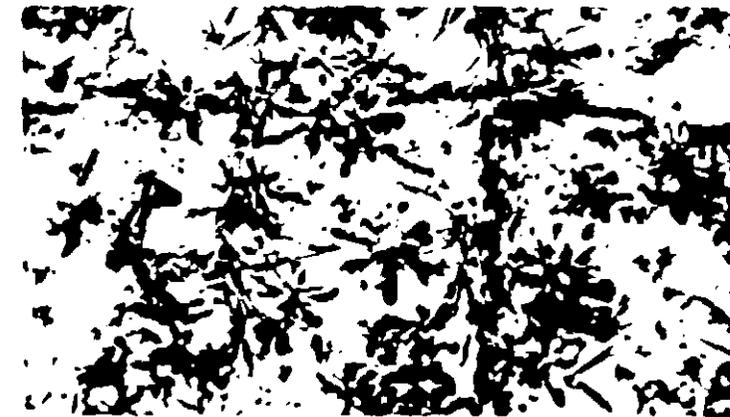
PURPLE MUSTARD

Photo taken 10 days after weeds on left were sprayed with Buctril

DO NOT SPRAY

Apply Buctril Early For Good Weed Control

This purple mustard is too large and past the most susceptible stage for Buctril treatment. It must be sprayed in the rosette stage when the rosette does not exceed the size of a half dollar.



PRODUCT NO.

156

NET CONTENTS
5 GALLONS

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ACTIVE INGREDIENT

Octanoic acid ester of bromoxynil* (3,5-dibromo-4-hydroxybenzotrile) 33.9%

INERT INGREDIENTS

Bromoxynil octanoate equivalent to 23.31% of bromoxynil or not less than 2.0 pounds of bromoxynil per gallon 66.1%

DIRECTIONS

IMPORTANT: Spray weeds soon after emergence for good weed control and to prevent competition to the crop.

WHEN TO APPLY: Make application before the crop has reached the boot stage. It is important that weeds are sprayed soon after they have emerged, when they are still seedlings and before they become shaded by the crop. Do not apply when plants are stressed from lack of moisture.

AMOUNT TO USE: 1 1/2 pints per acre for the more susceptible weeds. For the less susceptible weeds marked with a star in the list, use 2 pints per acre.

HOW TO APPLY: Apply as a water mix spray. BUCTRIL is a contact weed killer and good coverage of the weeds is essential.

FOR GROUND APPLICATION EQUIPMENT: Apply in a minimum of 25 gallons total spray per acre. Use a higher gallonage if necessary to get good coverage. Nozzle pressure should be at least 20 p.s.i.

FOR AERIAL APPLICATION: Apply in a minimum of 10 gallons of total spray per acre. The plane should fly at a height above the crop to insure good coverage of weeds. Width of swath flown must not exceed length of spray boom.

Local conditions may affect the use of this chemical. Consult State agricultural extension or Experiment Station weed specialists for specific recommendations for local weed problems.

Seller makes no warranty of any kind, express or implied, concerning the results of use of this product. Buyer assumes all risk of use or handling whether in accordance with directions or not.

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Do not take internally. Avoid contact with skin, eyes or clothing. In case of contact, flush eyes with plenty of water, get medical attention. Wash skin with soap and water.

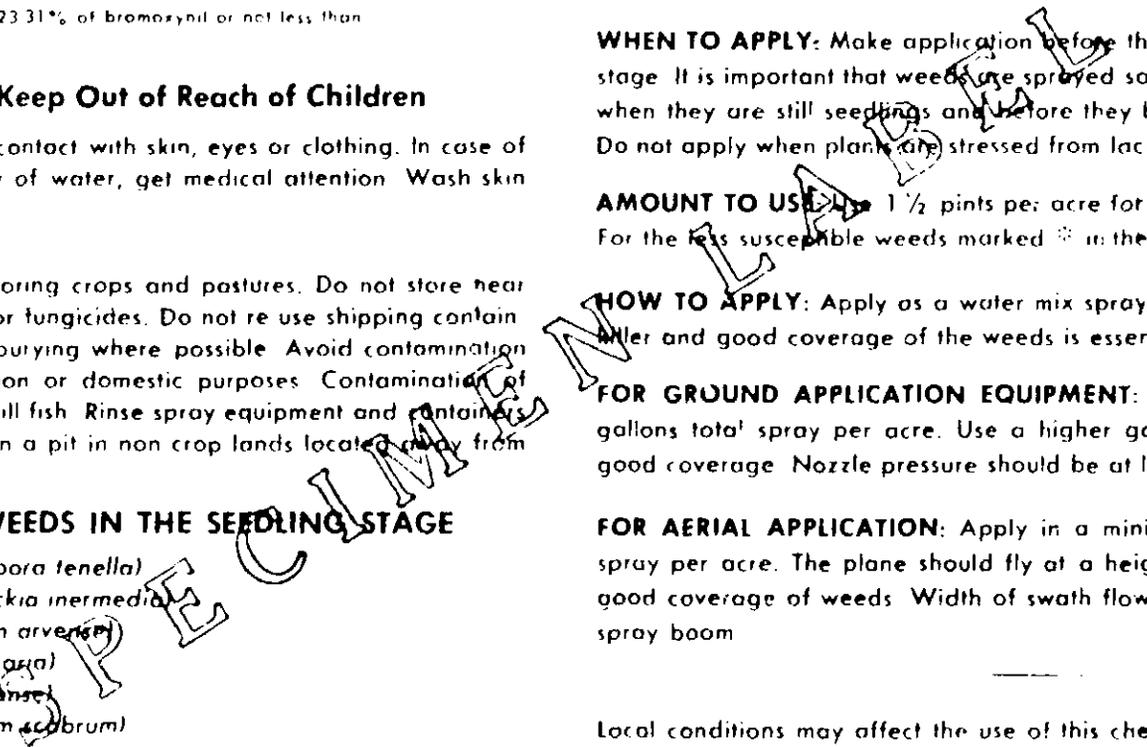
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Avoid spray drift onto neighboring crops and pastures. Do not store near seeds, fertilizers, insecticides or fungicides. Do not re-use shipping containers; destroy by crushing and burying where possible. Avoid contamination of water intended for irrigation or domestic purposes. Contamination of water with this chemical may kill fish. Rinse spray equipment and containers and dispose of liquid wastes in a pit in non-crop lands located away from water supply.

CONTROL THESE WEEDS IN THE SEEDLING STAGE

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- Wild Buckwheat (*Polygonum convolvulus*)
- *Wild Mustard (*Brassica kaber*)
- *Less susceptible weed.

Do NOT Store with Foodstuffs



Seedling Weeds in Wheat and Barley



UNTREATED

TREATED

PURPLE (BLUE) MUSTARD CONTROL 60 DAYS AFTER APPLICATION

Wheat planted November 30. Treated February 29 when crop was in the 3-leaf stage. Mustard was up to the size of a half dollar. Photo taken April 27.

Controls These Tough Weeds

FIDDLENECK (TARWEED) • PURPLE MUSTARD
WILD BUCKWHEAT • CROMWELL
AND MANY OTHERS

When Sprayed in Seedling Stage

SEE REVERSE SIDE FOR LABEL INFORMATION

Burtol should be applied early, before weeds have robbed the seedling crop of valuable moisture.

Burtol does not have the volatility of herbicides to endanger nearby crops. It does not leave harmful residues in the soil or on crops when used as directed.

Burtol should be applied soon after emergence when weeds are in the early seedling stage and grain is in the 2-leaf stage. Use on fall or spring planted wheat and barley.

Burtol acts by contact, requires enough water for good distribution and thorough spray coverage. Use a minimum of 25 gallons of water per acre by ground sprayers and 10 gallons by airplane, cover thoroughly. Do not apply when growth is critical or stressed.

Burtol is an easily soluble concentrate containing 2 pounds of active ingredient. Brand name is set apart in the form of Burtol-Ex-Ortoborate.

Burtol has increased yields 16 to 15% over previous years when applied to wheat and barley in the 2-leaf stage when 2,4-D would cause the crop and reduce yields.

Packed in 5 Gallon Drums

ACCEPTED

JUN 26 1967

UNDER THE FEDERAL RESERVE DE
FUNDS AND FEDERAL RESERVE ACT
FOR ECONOMIC POLICY REFORM
ED UNDER NO. 35, 1967
TO AT 1, 1967



MANUFACTURED BY
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BURLINGAME, CALIFORNIA

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