



Unique Mode of Action

# Brake<sup>®</sup> On! Herbicide

Product Use Guide





# Brake<sup>®</sup> On! Herbicide

## New Herbicide for Permanent Crops of Cherries, Peaches, Plums, Pistachios, Avocados, and Tangerines/Mandarins with a New Mode of Action

Although new to most permanent crop growers, the active ingredient in Brake On! herbicide has been used successfully in cotton the past several years. Research in permanent crops began shortly thereafter with the goal of understanding the spectrum of weeds controlled, generating crop selectivity data, and establishing MRLs for these markets.

### Unique Mode of Action

Brake On! has a unique mode of action relative to all other residual herbicides used in permanent crops. Categorized as a HRAC Group 12, it inhibits phytoene desaturase (PDS), an enzyme necessary for carotenoid biosynthesis. Lack of carotenoids causes bleaching in susceptible plant species. Brake On! is taken up by the roots and readily translocated making it ideally suited for preemergence use. It controls a broad spectrum of annual grass and broadleaf weeds, including weeds that have developed resistance to other herbicides.

This unique mode of action makes Brake On! a perfect tank-mix partner for other residual herbicides, and a rotational option in many IPM programs. Including Brake On! in your program helps protect against the development of resistance and broadens the spectrum of weeds controlled, making your program more effective and sustainable.

### Broad-spectrum Weed Control

The **table below** lists many of the weeds controlled by Brake On! herbicide. For the most comprehensive and up to date information, be sure and consult the product label as new research will expand this list quickly. Tank-mixing with complementary products will also increase the spectrum of control.

Broadleaf Weeds Controlled		Grasses Controlled	Partially Controlled
Annual sowthistle	Pigweed (including Palmer amaranth)	Annual bluegrass	Texas panicum
Blessed milkthistle	Prickly lettuce	Barnyardgrass	Morningglories
Carpetweed	Prickly sida (teaweed)	Crabgrass	Cocklebur
Florida pusley	Prostrate knotweed	Goosegrass	Sicklepod
Ground cherries	Puncture vine	Hare barley	Hemp sesbania
Horseweed (marestail)	Purple deadnettle	Italian ryegrass	Florida beggarweed
Hairy fleabane	Purslane	Johnsongrass (seedling)	Tropic croton
Hairy willowherb	Ragweeds	Junglerice	
Henbit	Shepard's purse	Orcutt lovegrass	
Lambsquarter	Spurges	Fall panicum	
London rocket	Redstem filaree	Red spangletop	
Mallow	Russian thistle		
Nightshades	Waterhemp		
Palmer amaranth	Whitestern filaree		
Panicle willowweed			

### Extended Performance Under Irrigated/Wet Conditions

Research has shown irrigation or wet soil conditions lengthen weed control provided by Brake On! (patent pending).

## Crisp Weed Control, without Frying your Crop

Brake On! herbicide delivers all this performance, without exerting undue stress on your crop. Numerous trials over the past several seasons demonstrates lack of phytotoxicity across a broad-spectrum of crops at various rate ranges. SePRO encourages growers to test Brake On! on a portion of their acres prior to complete adoption. The table below summarizes selectivity trials on various crops, across numerous growth stages and across different climatic conditions.

Year	Crop	Result	Cooperator
2014	Mandarin	No injury at 2X max label rate	Steve Deitz - Sawtooth Ag Research
2015	Peach	No injury at 2X max label rate	Dr. Brad Hanson - UC Davis
2016	Peach	No injury at 2X max label rate	Dr. Brad Hanson - UC Davis
	Peach	No injury at 2X max label rate	Dr. Mick Canevan - UCCE Emeritus
2017	Pistachio	No injury at 1.5X max label rate	Steve Deitz - Sawtooth Ag Research
	Sweet cherry	No injury at max label rate	Dr. Brad Hanson - UC Davis
	Sweet cherry	No injury at max label rate	Dr. Mick Canevan - UCCE Emeritus
	Pomegranate	No injury at 2X max label rate	Dr. Brad Hanson - UC Davis
	Prune	No injury at max label rate	Dr. Brad Hanson - UC Davis
2018	Pistachio	No injury at 1.5X max label rate	Steve Deitz - Sawtooth Ag Research
	Prune	No injury at 2X max label rate	Dr. Brad Hanson - UC Davis
	Sweet cherry	No injury at 2X max label rate	Dr. Mick Canevan - UCCE Emeritus
	Mandarin	No injury at 2X max label rate	Steve Deitz - Sawtooth Ag Research
2019	Pistachio	No injury at 2X max label rate	Steve Deitz - Sawtooth Ag Research
	Prune (year 2 sequential treat)	No injury after 2 consecutive year at 2X label rate	Dr. Brad Hanson - UC Davis
2020	Sweet cherry	No injury at 2X max label rate	Megan Townsend - Crop Matters LLC
	Sweet cherry (Bing)	No injury at 2X max label rate	Ross Benedict - Collins Agricultural Consultants
	Sweet cherry (Rainier)	No injury at 2X max label rate	Collins Agricultural Consultants
	Sweet cherry	No injury at 2X max label rate	Dr. Marcelo Moretti - Oregon State

## The Bottom line

Brake On! herbicide benefits your residual weed control program in several ways:

- Unique mode of action to manage weed resistance, ensuring a sustainable program over time
- Broad-spectrum, season long control frees you up to manage other aspects of your operation
- Performs well in irrigated or wet conditions when other herbicides may fade
- Outstanding crop safety ensures your rows stay clean, and your crop stays green

## Registration Status

Currently registered in the following states: AZ, CO, FL, GA, MI, NM, NC, OR, PA, SC, TX, VT, WA, & WI.



**SePRO Corporation**  
11550 North Meridian Street  
Suite 600  
Carmel, IN 46032 USA  
**1-800-419-7779**  
[sepro.com](http://sepro.com)



**SePRO Ag™**  
*Upgrade Your Crop™*

Always read and follow label directions. Brake is a registered trademark of SePRO Corporation. ©Copyright 2020 SePRO Corporation. New 11/05/2020.