

Axalion® Active

Insecticide

BASF

We create chemistry

Introducing Axalion® Active

The new active ingredient insecticide, Axalion Active, unveils a new class of chemistry with a new mode of action, targeting the control of many problematic piercing and sucking pests, including superior whitefly control.* Uses for Axalion include fruits, vegetables, soybeans, legumes, cotton, cereals, beets, oilseed rape and ornamentals.

Thanks to its predictable, balanced and reliable performance, Axalion is an essential part of a farmer's toolbox for Integrated Pest Management (IPM), resulting in healthier plants, better yields and higher quality production. When applied according to the label, Axalion offers growers highly efficacious control of many problematic piercing and sucking pests.



Key features and benefits

Broad spectrum control of piercing and sucking pests

- ✓ Whiteflies
- ✓ Leafhoppers/jassids
- ✓ Scales
- ✓ Psyllids
- ✓ Aphids
- ✓ Thrips
- ✓ Mealybugs
- ✓ Russet/rust mites (species specific)

New mode of action

Axalion inhibits the basal function of the chordotonal organs, which quickly causes the target insects to become uncoordinated and unable to feed (therefore, they are incapable of transmitting viruses and bacteria), until they eventually die. Based on research and discovery by BASF, Axalion is the only representative of Insecticide Resistance Action Committee (IRAC) Group 36, targeting a new site in chordotonal organs. It is also the only representative of a unique insecticidal class of chemistry, the Pyridazine amides (or Pyridazine pyrazolecarboxamides).

Green peach aphid control on spinach



Source: BASF internal trial, 2022.
Treated spinach with Axalion at 60 g ai/ha.

No known cross resistance

Axalion is highly potent on multiple life stages, and, due to its novel mode of action, it also controls pests that have developed resistance to existing chemistries. Therefore, Axalion is an excellent partner for insect resistance management programs. Axalion helps growers to successfully safeguard their crops while strengthening the longevity of existing tools for complete insect pest management programs.

PHI: Low

Reentry interval: Reentry once dried

Application methods:

- ✓ Greenhouse
- ✓ Foliar spray
- ✓ Drench and drip
- ✓ Drone

* Based on BASF internal trial data from 2018 to 2022.

The new benchmark for whitefly control

Silverleaf whitefly control on eggplant



Source: BASF internal trial, 2022.
Treated eggplant with Axalion at 120 g ai/ha.

Flexibility in timing and application

The systemic properties of Axalion® offer growers a wide window of application timing during early to late growth stages. This includes late growth stage spraying when canopies are already closed and reaching target pests would normally be a challenge. Axalion provides long-lasting residual control due to systemic properties.

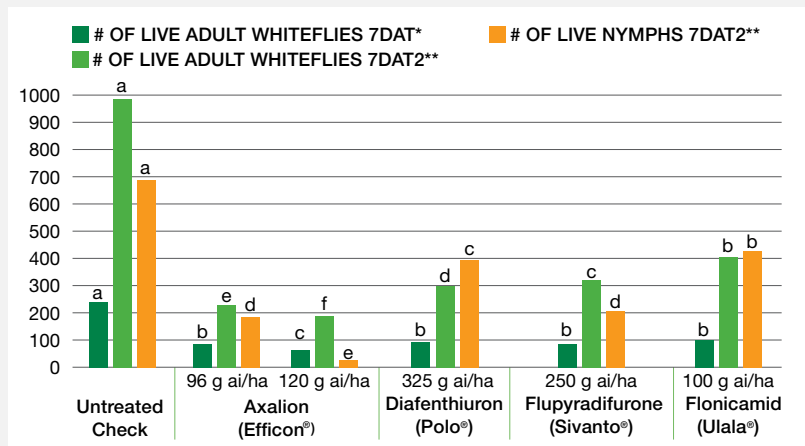
Works harmoniously with beneficials

Axalion is highly compatible with non-target organisms and beneficial insects, including pollinators, when applied according to label instructions.

Biology activity of Axalion Active and commercial competitors for control of silverleaf whitefly in eggplant: open field trial

Population control of silverleaf whitefly (*Bemisia tabaci*)

Reduction of the population as compared to the untreated check and competitive commercial standards



PEST	ASSESSMENT	ADULTS 7DAT	ADULTS 7DAT2	NYMPHS 7DAT2
Silverleaf whitefly (<i>Bemisia tabaci</i>)	# of live whitefly in check	236	987	692

Quick adult mortality, within three days after treatment, was observed with Efficon® Insecticide, powered by Axalion Active. Efficon delivered excellent subsequent generational control, as denoted by number of viable nymphs. When compared to the untreated check and competitive commercial standards, Efficon activity for adult knockdown and subsequent population was reduced.

Efficon resulted in enhanced crop vigor perceived as clear visual differences between the treated plots at the conclusion of trial.

Means followed by the same letter do not significantly differ (P=0.05, Student-Newman-Keuls)

*7DAT = 7 Days After Treatment **7DAT2 = 7 Days After Second Treatment

Source: BASF Trial 2019. Trial ID: DEV-I-2019-AX-202-A-01.0-IN-IN0-A12 Crop: Eggplant; Target Pest BEMITA; water volume; 500L/ha; Applications 2; 45 plants per plot (2x6.5m), 1 leaf per plant, 3 replicates (plots) per treatment; Date: March 1, 2019; Randomized Complete Block, Crop 40 days after planting at start of trial.

Note: Applications were conducted as curative foliar spray applications wherein whitefly population was naturally occurring and very high throughout course of the trial.

This document provides general information about Axalion® Active insecticide. Commercial sales of Axalion are projected to begin in 2023.

Always read and follow label directions. If you have any further questions or need additional support, please contact your BASF sales representative.

Axalion® and Efficon® are trademarks of BASF. Polo® is a registered trademark of Syngenta. Sivanto® is a registered trademark of Bayer Group. Ulala® is a registered trademark of UPL.

©2023 BASF SE. All rights reserved. www.agro.basf.com Global Strategic Marketing, Insecticides

This document, or any information provided herein does not constitute a legally binding obligation of BASF and has been prepared in good faith and is believed to be accurate as of the date of issuance. Unless expressly agreed otherwise in writing in a supply contract or other written agreement between you and BASF: (a) To the fullest extent not prohibited by the applicable laws, BASF EXPRESSLY DISCLAIMS ALL OTHER REPRESENTATIONS, WARRANTIES, CONDITIONS OR GUARANTEES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, BY FACT OR LAW, INCLUDING ANY IMPLIED WARRANTIES, REPRESENTATIONS OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, NON-INFRINGEMENT, AND ANY REPRESENTATIONS, WARRANTIES, CONDITIONS OR GUARANTEES, ARISING FROM STATUTE, COURSE OF DEALING OR USAGE OF TRADE and BASF HEREBY EXPRESSLY EXCLUDES AND DISCLAIMS ANY LIABILITY RESULTING FROM OR IN CONNECTION WITH THIS DOCUMENT OR ANY INFORMATION PROVIDED HEREIN, including, without limitation, any liability for any direct, consequential, special, or punitive damages relating to or arising therefrom, except in cases of (i) death or personal injury to the extent caused by BASF's sole negligence, (ii) BASF's willful misconduct, fraud or fraudulent misrepresentation or (iii) any matter in respect of which it would be unlawful for BASF to exclude or restrict liability under the applicable laws; (b) Any information provided herein can be changed at BASF's sole discretion anytime and neither this document nor the information provided herein may be relied upon to satisfy from any and all obligations you may have to undertake your own inspections and evaluations; (c) BASF rejects any obligation to, and will not, automatically update this document and any information provided herein, unless required by mandatory applicable law; and (d) The user is responsible for confirming that the user has retrieved the most current version of this document from BASF as appropriate.