



AGRIMEK®

Miticide / Insecticide

Technical Brochure



syngenta



Agri-Mek®: We Won't Leave You Stranded

Agri-Mek, from Syngenta Crop Protection Canada Inc., is a highly effective insecticide/miticide proven to be a powerful tool in protecting a wide range of food crops and establishing reliable control of economically damaging pests. There is only one name growers can trust in the field and beyond to not leave them stranded – Agri-Mek.

Longest Residual

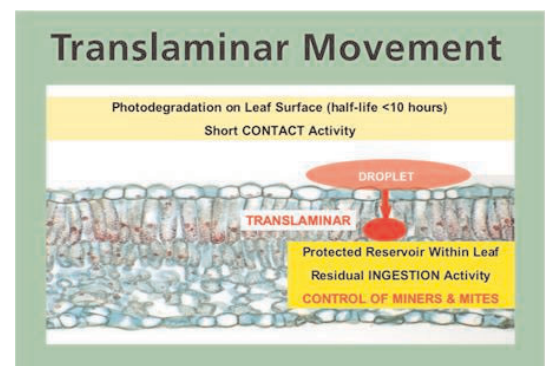
The active ingredient in Agri-Mek is a member of the avermectin class, commonly referred to as abamectin. The formulation has been engineered to maximize penetration of the targeted plant tissue creating an abamectin reservoir for extended residual control. Agri-Mek moves throughout leaves via translaminar movement, moving through the leaf cuticle and epidermis into the mesophyll layer, providing the foundation for weeks of residual control.

What is Translaminar Movement?

Translaminar movement is the rapid movement from the leaf surfaces to internal leaf tissue in the epidermis and mesophyll layers, resulting in a reservoir of active ingredient. Insects that consume the leaf or feed in the mesophyll layer ingest the active ingredient, stop feeding and die within one to two days.

Factors that Affect Translaminar Movement:

- Product coverage and rate
- Cuticle hardness
- Rate of breakdown on the leaf surface (photolysis)
- Quality of formulation
- Adjuvants



Label at a Glance

APPLES

Pests	Timing	Rates	Max # Applications	PHI Days	Precautions
Two-spotted spider mites, McDaniel mites, European red mites, Spotted tentiform leafminer.	Make applications within the period from petalfall through 6 weeks following petalfall.	For dilute sprays - 20 mL/100L For concentrate sprays - 750 mL/ha	1 application per season.	28	Do not apply in less than 375 L/ha of water per hectare.
Rate of Superior 70 paraffinic spray oil		minimum 0.25% for dilute sprays minimum of 10 L/ha for concentrate sprays			

STRAWBERRIES

Pests	Timing	Rates	Max # Applications	PHI Days	Precautions
Post-harvest control of Two-spotted spider mites and McDaniel spider mites.	Use post-harvest only.	1 L/ha	Maximim of 2 applications per growing season.	-	Do not apply within 10 months of harvest.
Pre-harvest control of Cyclamen mites, Two-spotted spider mites and McDaniel spider mites.	Apply first application when mites first appear. Reapply if monitoring indicates that it it necessary. Allow 7-10 days between applications.	1 L/ha	Maximim of 2 applications per growing season.	3	Apply in a minimum spray volume of 375 L/ha. Spray volume will vary with plant density per hectare. If necessary, wait 7-10 days for second application.

PEARS

Pests	Timing	Rates	Max # Applications	PHI Days	Precautions
Two-spotted spider mites, McDaniel mites, European red mites, Pear rust mite, Yellow mite.	Make applications within the period from petalfall through 6 weeks following petalfall.	For dilute sprays - 20-40 mL/100L For concentrate sprays - 750-1500 mL/ha	1 application per season.	28	Do not apply in less than 375 L/ha of water per hectare. If a second application is necessary, do not retreat within 21 days.
Pear Psylla	Apply no later than 21 days after petalfall. Apply when most mites are in the nymphal stage.	For dilute sprays - 20-40 mL/100L For concentrate sprays - 750-1500 mL/ha	Do not exceed 1.5L of AgriMek per hectare per growing season.	28	AgriMek 1.9% EC plus oil may cause fruit injury to certain pear varieties like d'Anjou. See label for specific precautions.
Rate of Superior 70 paraffinic spray oil		minimum 0.25% for dilute sprays minimum of 10 L/ha for concentrate sprays			

CANE BERRIES

Pests	Timing	Rates	Max # Applications	PHI Days	Precautions
Post-harvest control of Two-spotted spider mites	Apply first application when mites appear. make second application 7-10 days later.	1 L/ha	Maximim of 2 applications per growing season.	14	Do not apply in less than 375 L/ha water volume. If necessary, wait 7-10 days for second application.

CELERY

Pests	Timing	Rates	Max # Applications	PHI Days	Precautions
Pea Leafminer (Liriomyza huidobrensis)	Apply when the pea leafminer flies and leaf damage is first observed.	0.6 - 1.1 L/ha	Maximim of 4 applications per growing season.	14	Do not apply in less than 200 L/ha water volume for good upper and lower leaf coverage. Do not make 2 sequential applications. Allow 7 days between applications if necessary.

Performance Results – The Translaminar Movement of Agri-Mek Provides Optimal Control.

When applied as a foliar spray, Agri-Mek moves into the leaf tissue via translaminar movement, providing complete protection even only if one side receives spray deposits.



Untreated Check



AgriMek®

- Unique rapid translaminar movement
- Active ingredient is stored in the leaf tissue for lasting control



Envidor®

- Only active on females
- Slow acting
- Problems when used in combination with oil



Acramite®

- Primarily a knock down product
- Poor residual

Notes:

Foliar applications were made with each of the respective products to the upper leaf surface only and allowed to dry. No adjuvants were used. Fifty two spotted spider mites were then confined to the bottom leaf surface of the common bean. **At 12 days after treatment (DAT), only Agri-Mek, with its unique translaminar movement characteristics, provided control of these mites as the other products required mite contact for control.**

Resistance Management

Agri-Mek has a unique mode of action and is unrelated to other crop protection chemicals, so cross resistance is considered unlikely. This makes Agri-Mek an ideal foundation for your resistance management program. Agri-Mek can control pests that have developed resistance to commonly used products with other modes of action. And because Agri-Mek “locks into the tissue”, beneficials on leaf surfaces are not harmed and the risk of pest flare-up is reduced.



The Quality of Agri-Mek... Features and Benefits

Features	Benefits
Unique mode of action and chemistry	Controls pests resistant to other pesticides and serves as the foundation for resistance management programs.
Residual control of target pests	Preserves yield and quality, and reduces the total number of applications needed for effective control.
Translaminar activity	Rapidly penetrates plant tissue and provides reliable, long-lasting control.
Rapid dissipation and degradation on leaf surfaces	Compatible with Integrated Pest Management (IPM) programs and does not cause secondary pest flare-ups.
Rainfast	The active ingredient is contained within the leaves, causing it to be unaffected by rain or irrigation once plant surfaces are dry.
IPM program compatibility	Once the foliar residue has dried, it has minimal toxic impact on beneficial insects.
Environmental profile	Binds tightly to all soils, degrades rapidly and uses a very low rate of active ingredient per area treated, causing no bioaccumulation or leaching, thus decreasing the risk of environmental contamination.



For more information on Agri-Mek,
please call Engage Agro at
1-866-613-3336 or visit:
www.engageagro.com
www.syngenta.ca



ENGAGE AGRO

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