



Management of Insects and Banks Grass Mite Field Corn, Popcorn, Seed Corn, & Sweet Corn

Two strategies for the management of Banks Grass Mite and Insects in Field Corn

Hero - 10.3 oz/A - Single application at initial colony formation below the ear leaf

OR

Hero - 5.12 oz/A - Initial application at initial colony formation below the ear leaf
A second application at 7-10 days after initial application

- The management of **Banks Grass Mite** in field corn with Hero insecticide/miticide is maximized through timing of the initial application at the beginning of mite population development to provide protection from further mite reproduction and upward colonization within the crop canopy. This strategy may be utilized with either a one application or two application treatment program, dependent upon the other insect pest spectrum and length of residual control necessary.
- To provide optimum management of both **Banks Grass Mite** and **Corn Rootworm Adults**, the use of a two treatment use pattern is recommended. This strategy is better timed to coincide with the extended emergence, feeding and egg-laying of CRW adults. When CRW adult pressure is heavy, a two application approach provides the greatest chance to maintain low beetle populations to reduce egg-laying. The addition of a fumigant such as methyl parathion or dimethoate aids in the control of heavy rootworm populations. Applying Hero at 5.12 oz twice, 7-10 days apart provides the ability to reinforce the initial active ingredient amount and maintain a sufficient dose of Hero as an extended protective barrier on Banks grass mites and other insects like corn borers, w. bean cutworm, corn earworm, grasshoppers, and many other pests.
- A single application of Hero at 10.3 oz is best utilized for the management of Banks Grass Mite as the primary threat and will also provide good residual control of a wide spectrum of pests such as corn borers, grasshoppers and western bean cutworm.
- Single application residual control is affected by the ai/A applied, coverage, and penetration into a dense crop canopy. Research by FMC and Texas A&M showed clearly that 75% or more of spray solution is deposited in the upper 50% of the canopy. Two applications at lower rates provide a reinforcement dose of protection at rates sufficient to provide extended residual control of insects and continuing suppression of mite colonization from an additive dose application. Original work with bifenthrin on food grade corn demonstrated the efficacy of this approach, proving that a preventative application of this miticide-insecticide beginning at ear development and followed with one to two follow-up treatments gave consistent optimum yield and quality results.
- Hero insecticide-miticide is the best choice in the marketplace as a single product for the management of multiple key pests in field corn. Hero is very cost effective as well, delivering the protection for the crop without the need to tank mix an insecticide and a miticide at a higher cost per acre.



- **Hero PHI: 30 days on Field, Pop, & Seed Corn / 60 days on Forage / 3 days on Sweet Corn.**



**Field Corn, Popcorn,
Seed Corn, & Sweet Corn**
Foliar Applications @ tassel
and later

- **Hero can all be tank mixed with fungicide treatments.**

Two Application Corn Rootworm Adult Control Guidelines

- Treat when initial rootworm adult populations exceed threshold at 0.75 beetles per plant and at least 10% of females are gravid.
- **1st Application - Hero 5.12 oz + 6-8 oz /A of methyl parathion** . Dual mode-of-action to aid in beetle knockdown throughout the corn canopy.
- **2nd Application - Hero 5.12 oz + 6-8 oz/A of methyl parathion** when CRW populations exceed 0.5-0.75 beetle per plant, generally around 10-17 days after the first application.
- If mite conditions warrant and colonies are quarter-size or greater on lower 1/3 of plant and increasing, shorten spray interval to **7-10 days** for added residual and add dimethoate at 1.0 pt/A with the 2nd application in place of methyl parathion for increased knockdown on Banks grass mite as well as CRW adults.
- Good spray coverage is critical to distribute chemical throughout the corn canopy. For aerial applications, 2 GPA minimum is required; 3-5 GPA is recommended, especially when conditions are hot, dusty, and heavy pollen shed. Addition of a surfactant or adjuvant such as COC or equivalent is recommended when temperatures exceed 90° F.
- Fields with extended CRW adult emergence and /or beetle migration may require more than 2 applications of a beetle control spray to prevent CRW larval damage the following season.

Single Application Mite Control / Containment Guidelines

The goal is to protect the upper ½ of the plant during ear fill by controlling/containing mite populations through active kill and prevention of further colonization. Avoid late rescue applications when mites are beyond threshold (lots of webbing), and corn is stressed as control of mite may be reduced.

- **Hero at 10.3 oz/A** for Banks Grass Mite and control of other insect pests listed below.
- **Banks Grass Mite** – apply control when colonies first form on lower 1/3 of plant prior to leaf damage or discoloration and before dispersal up the rest of the corn plant.
- Under severe mite conditions, tank-mix **Hero 10.3 oz + Dimethoate at 1.0 pt./A** for best performance. Under rapidly expanding populations and stressed conditions, control may be difficult to achieve. Early treatment ensures that populations do not get away from management and control tactics. For aerial applications, apply finished spray volume at 3-5 gpa + crop oil or equivalent product at 1.0 pt/A if temperatures exceed 90° F during application.
- Under overhead irrigation, application of 0.75-1.0 inch of water has demonstrated further distribution of product.
- On gravity irrigation / dryland, excessive dirt on leaves may affect performance.

Insects Controlled with Contact and Residual control of Hero in 1 or 2 application programs

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|---------------------------|-------------------------|--------------------------|
| ✓ European corn borer | ✓ Bird-cherry oat aphid | ✓ Two-spot spider mites* |
| ✓ Southwestern corn borer | ✓ Grasshoppers | ✓ Corn earworm** |
| ✓ Western bean cutworm | ✓ Corn rootworm adults | ✓ Fall armyworm |
| ✓ Corn leaf aphids | ✓ Stinkbug | ✓ True armyworm |

* Two-spot spider mites suppression only. ** Suppression of corn earworm with single applications. Multiple applications required to control earworm as moths continue to lay eggs in silks.

If you are going to treat, treat early for best results.