



Current Report

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Management of Insect Pests in Rangeland and Pasture

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Arthropod pests of rangeland and pasture rarely become a serious economic problem. When a problem develops it can often be abridged by using good cultural practices, such as proper fertilization, mowing, and optimal stocking rates. Pesticide applications should not replace the use of good pasture management practices and should not be applied as preventative insurance because it is rarely economically or environmentally justifiable.

Pesticide recommendations in this publication were correct as of the Modified Date. Always check the label that came with the purchased insecticide for the most current rates and restrictions. The following fact sheets contain additional information on Rangeland and Pasture Management:

- PSS-2867 - Difference Between Range and Introduced Pasture Management
- PSS-2869 - Management Strategies for Rangeland and Intro-duced Pastures
- PSS-2871 - Stocking Rates: The Key to Successful Livestock Production
- PSS-2875 - Intensive Early Stocking
- PSS-2559 - Tall Fescue Establishment and Management
- PSS-2571 - Cool Season Annual Forage Grasses
- PSS-2581 - Seeding Marginal Cropland to Perennial Grasses
- PSS-2587 - Bermudagrass for Grazing or Hay
- PSS-7196 - Grasshopper Management in Rangeland, Pastures, and Crops

Management of Insect Pests in Rangeland and Pasture

| Pest, Damage, and Treatment Threshold | (Group) | Insecticide & Formulation | Rate of Product per Acre | Comments |
|--|------------------|--|---|---|
| <p>Ants (including fire ants) Ants range in size from 1/16 inch to nearly 1/2 inch in length and from light tan to black in color. These social insects live in a colony with thousands of workers. The two most important pest species for rangeland and pasture are the red imported fire ant and the red harvester ant.</p> <p>Damage: Fire ants can be an irritant to cattle as they feed. Harvester ants sometimes clear large patches of grass as they feed.</p> <p>Threshold: No threshold has been established.</p> | Baits | | | |
| | (20) | Amdro Pro | 3 to 5 tbs/mound (1 to 1.5 lbs/acre) | Do not exceed 4 applications per year. Do not exceed 8 lbs per acre/year. 7 day waiting period for harvest. |
| | (7B) | Award | 1 to 3 tbs/mound (1 to 1.5 lbs/acre) | For non-grazed or horse-grazed pasture/rangeland only. |
| | (7C) | Distance | 1 to 4 tbs/mound (1 to 1.5 lbs/acre) | For non-grazed rangeland and pasture only. |
| | (7A) | Extinguish | 3 to 5 tbs/mound (1 to 1.5 lbs/acre) | 0 day waiting period for grazing or harvesting. |
| | (5) | Justice | 4 to 6 tbs/mound | Individual mound treatment only. Repeat every 10 to 12 weeks as needed. |
| | Non Baits | | | |
| | (1A) | Sevin 80S | 8.3 gms/gal water | For red imported fire ants. Individual mound treatment only. Repeat application in 7 days if activity resumes |
| | (1A) | Sevin 80 WSP | 1 pak/67.3 gal water | |
| | (1A) | Sevin 4F | 0.75 oz/gal water | |
| (1A) | Sevin XLR Plus | 0.75 oz/gal water | | |
| | | | | For all ant baits: Apply treatment when ants are active and soil temperatures exceed 60 degrees. If treating individual mounds, estimate the mound density, and do not disturb the mound or apply the bait directly on the mound according to label directions. |
| <p>Armyworm Caterpillar can reach slightly over 1 inch. Dark green or brown with 5 stripes along body.</p> <p>Damage: Feed on foliage, usually a problem in the spring.</p> <p>Threshold: Treat when caterpillars are abundant and foliage is being destroyed.</p> | (11B1,B2) | <i>B. thuringiensis</i> Biorbit Javelin WG Xen Tari | 0.5 to 2 lbs 0.25 to 1.5 lbs 0.5 to 2 lbs | Use higher rate for heavy infestations or when plant growth is rapid. A contact insecticide may be added for enhanced control of heavy populations. 0 day waiting period for grazing or harvesting. |
| | (3) | Baythroid 2 | (Awaiting registration) | |
| | (18) | Confirm 2F | 8 fl oz | 0 day waiting period for grazing or harvesting. |
| | (1A) | Lannate ^R | 0.75 to 3 pt | For Bermudagrass pasture ONLY. 7 day waiting period for grazing, 3 day waiting period for harvesting. |
| | (1B) | Malathion 5EC | 2 pt | 0 day waiting period for grazing or harvesting. |
| | (1B) | Methyl parathion 4E ^R | 1.5 pt | Remove livestock when spraying; 15 day waiting period for grazing or harvesting. |
| | (1A) | Sevin 80S | 1.25 to 1.875 lbs | For improved pasture only: Do not apply more than 2 applications per season and not more than once every 14 days. Sevin label states a 14 day waiting period for grazing or harvesting. |
| | (1A) | Sevin 80 WSP | 1.25 to 1.875 lbs | |
| | (1A) | Sevin 4F | 2 to 3 pt | |
| | (1A) | Sevin XLR Plus | 2 to 3 pt | |

| Pest, Damage, and Treatment Threshold | (Group) | Insecticide & Formulation | Rate of Product per Acre | Comments | |
|---|----------------|---|---|--|--|
| <p>Fall armyworm Large striped caterpillar that reaches 1.5 inches when mature. Has an inverted "Y" in the front of its head.</p> <p>Damage: Feed on foliage, reducing forage. Typically a problem in the fall.</p> <p>Threshold: Treat when worms are abundant and foliage is being destroyed.</p> | (11B1,B2) | <i>B. thuringiensis</i> Biobit Javelin WG Xen Tari | 0.5 to 2 lbs 0.25 to 1.5 lbs 0.5 to 2 lbs | Use higher rate for heavy infestations or when plant growth is rapid. A contact insecticide may be added for enhanced control of heavy populations. 0 day waiting period for grazing or harvesting. | |
| | (18) | Confirm 2F | 8 fl oz | 0 day waiting period for grazing or harvesting. | |
| | (1A) | Lannate [®] LV | 0.75 to 3 pt | For Bermudagrass pasture ONLY. 7 day waiting period for grazing, 3 day waiting period for harvesting. | |
| | (1A) | Lannate [®] SP | 0.25-0.5 lb | | |
| | (1B) | Malathion 5 E | 2 pt | 0 day waiting period for grazing or harvesting. | |
| | (1A) | Sevin 80S | 1.25 to 1.875 lbs | For improved pasture only: Do not apply more than 2 applications per season and not more than once every 14 days. Sevin label states a 14 day waiting period for grazing or harvesting. | |
| (1A) | Sevin 80 WSP | 1.25 to 1.875 lbs | | | |
| (1A) | Sevin 4F | 2 to 3 pt | | | |
| (1A) | Sevin XLR Plus | 2 to 3 pt | | | |
| <p>Grasshopper Distinctive insects with enlarged hindlegs for jumping. Adults have two pair of wings, forewings are leathery, hindwings are membranous. They have chewing mouthparts. Adults range in size from 1/2 to 2 inches long.</p> <p>Damage: Feed on foliage. Can damage from spring through fall, but more of a problem in late summer. Small grasshoppers less than 1/2 inch are more easily controlled and can be spot treated with foliar spray if nesting sites are mapped out in spring.</p> <p>Threshold: Small nymphs: (less than 1/2 inch) 24 to 100 per yard².</p> <p>Large: (greater than 1/2 inch) 8 to 40 per yard².</p> | Pasture | | | | |
| | (15) | Dimilin 2L | 2 fl oz | Apply when majority of grasshoppers are 2nd or 3rd instar nymphs (less than 1/2 inch). Do not exceed a total of 2 fl oz per year. | |
| | (1A) | Sevin 80S | 1.25 to 1.875 lbs | For improved pasture: Do not apply more than 2 applications per season and not more than once every 14 days. Sevin label states a 14 day waiting period for grazing or harvesting in pastures. | |
| | (1A) | Sevin 80 WSP | 1.25 to 1.875 lbs | | |
| | (1A) | Sevin 4F | 2 to 3 pt | | |
| | (1A) | Sevin XLR Plus | 2 to 3 pt | | |
| | Range | | | | |
| | (15) | Dimilin 2L | 0.5 to 2 fl oz | Applications of Dimilin may be applied as a Reduced Area and Agent Treatment (RAAT) strip spray. See label for specific directions. Apply when majority of grasshoppers are 2nd or 3rd instar nymphs (less than 1/2 inch). Do not exceed 1 fl oz/acre/year. If second application is needed, wait 2 to 3 weeks from first application. | |
| | (1B) | Malathion 5 E | 1.5 to 2 pt | 0 day waiting period for grazing or harvesting. | |
| | 1B) | Methyl parathion 4E [®] | 1.5 pt | Remove livestock when spraying. 15 day waiting period for grazing or harvesting. | |
| (1A) | Sevin 80S | 0.675 to 1.875 lbs | 0 day waiting period for grazing. Do not make more than 1 application of Sevin per year, and do not exceed 1.0 lb ai/acre per year. | | |
| (1A) | Sevin 80 WSP | 0.675 to 1.875 lbs | | | |
| (1A) | Sevin 4F | 1 to 3 pt | | | |
| (1A) | Sevin XLR Plus | 1 to 3 pt | | | |

| Pest, Damage, and Treatment Threshold | (Group) | Insecticide & Formulation | Rate of Product per Acre | Comments |
|---------------------------------------|----------------|---------------------------|---|--|
| Tick | Pasture | | | For improved pasture: Do not apply more than 2 applications per season and not more than once every 14 days. Sevin label states a 14 day waiting period for grazing or harvesting in pastures. |
| | (1A) | Sevin 80S | 1.25 to 1.875 lbs | |
| | (1A) | Sevin 80 WSP | 1.25 to 1.875 lbs | |
| | (1A) | Sevin 4F | 1 to 1.5 qt | |
| | (1A) | Sevin XLR Plus | 1 to 1.5 qt | |
| | Range | | | |
| | (1A) | Sevin 80S | 1.25 lbs | |
| | (1A) | Sevin 80 WSP | 1.25 lbs | |
| (1A) | Sevin 4F | 1 qt | 0 day waiting period for grazing. Do not make more than one application of Sevin per year, and do not exceed 1.0 lb ai/acre per year. | |
| (1A) | Sevin XLR Plus | 1 qt | | |

R = Restricted Use

Pre-harvest Intervals (PHI) and grazing restrictions

| | |
|-------------------------------|---|
| Amdro/Seige | 7 day PHI for harvest |
| Confirm | 0 day PHI for grazing or harvest |
| Dimilin | 0 day PHI for grazing or harvest |
| Extinguish | 0 day PHI for grazing or harvest |
| Lannate ^R | For bermudagrass ONLY. 7 day PHI for grazing, 3 day PHI for harvest |
| Malathion | 0 day PHI for grazing or harvest |
| Methyl parathion ^R | 15 day PHI for grazing or harvest |
| Sevin | 14 day PHI for grazing or harvest |

* Group numbers in parentheses (#) preceding the insecticide name are used to designate the mode of action of the insecticide according to the classification system developed by the Insecticide Resistance Action Committee, (IRAC) in 2005. It is intended to help in the selection of insecticides for preventative resistance management. If you make multiple applications for a specific pest during a growing season, simply select a registered insecticide with a different number for each application. To further delay resistance from developing, integrate other control methods into your pest management programs.

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