

2003

EC03-1569 Grasshopper Identification Guide for Cropland Grasshoppers: Summer Feeding Species

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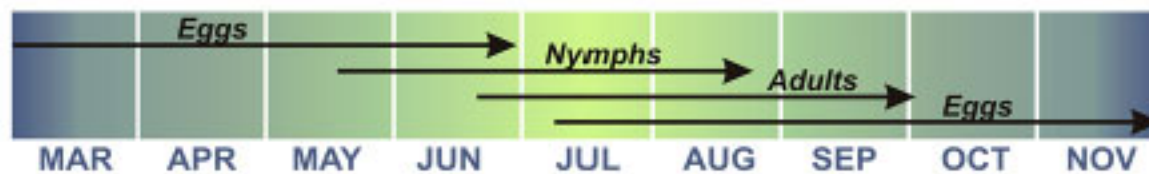
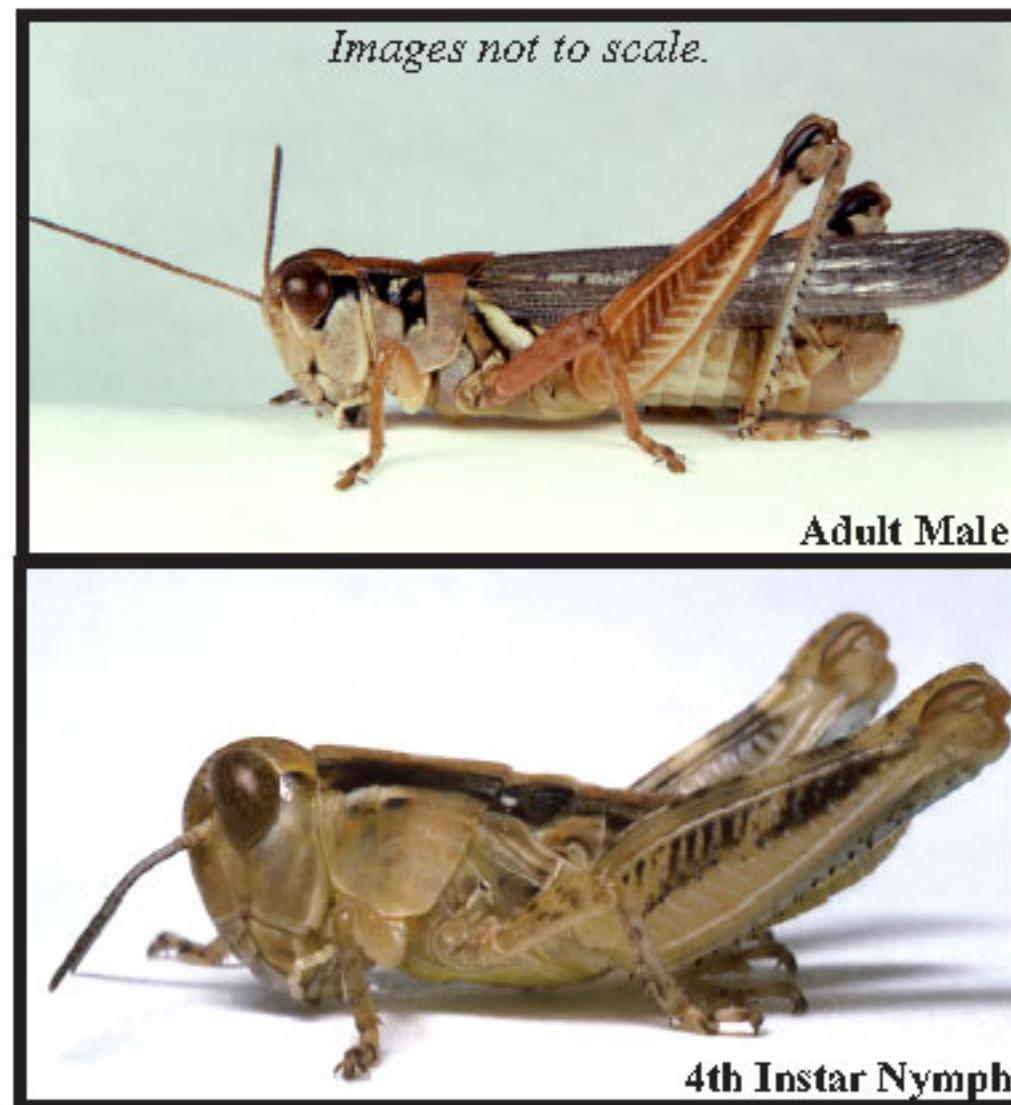
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Seymour, Ronald C.; Hein, Gary L.; Campbell, John B.; and Kalisch, James A., "EC03-1569 Grasshopper Identification Guide for Cropland Grasshoppers: Summer Feeding Species" (2003). *Historical Materials from University of Nebraska-Lincoln Extension*. 1086. <http://digitalcommons.unl.edu/extensionhist/1086>

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Migratory Grasshopper

Melanoplus sanguinipes



Facts

- The most important crop-damaging grasshopper.
- Severe pest of small grains, alfalfa, clover, corn and vegetables.
- Feeds on forbs and grasses by climbing on plants and consuming leaves.
- Begins to hatch in mid-May.
- Lays eggs in soil at the base of grasses.

Adult Identification

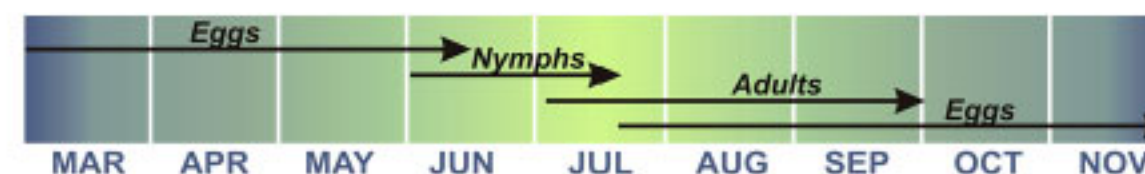
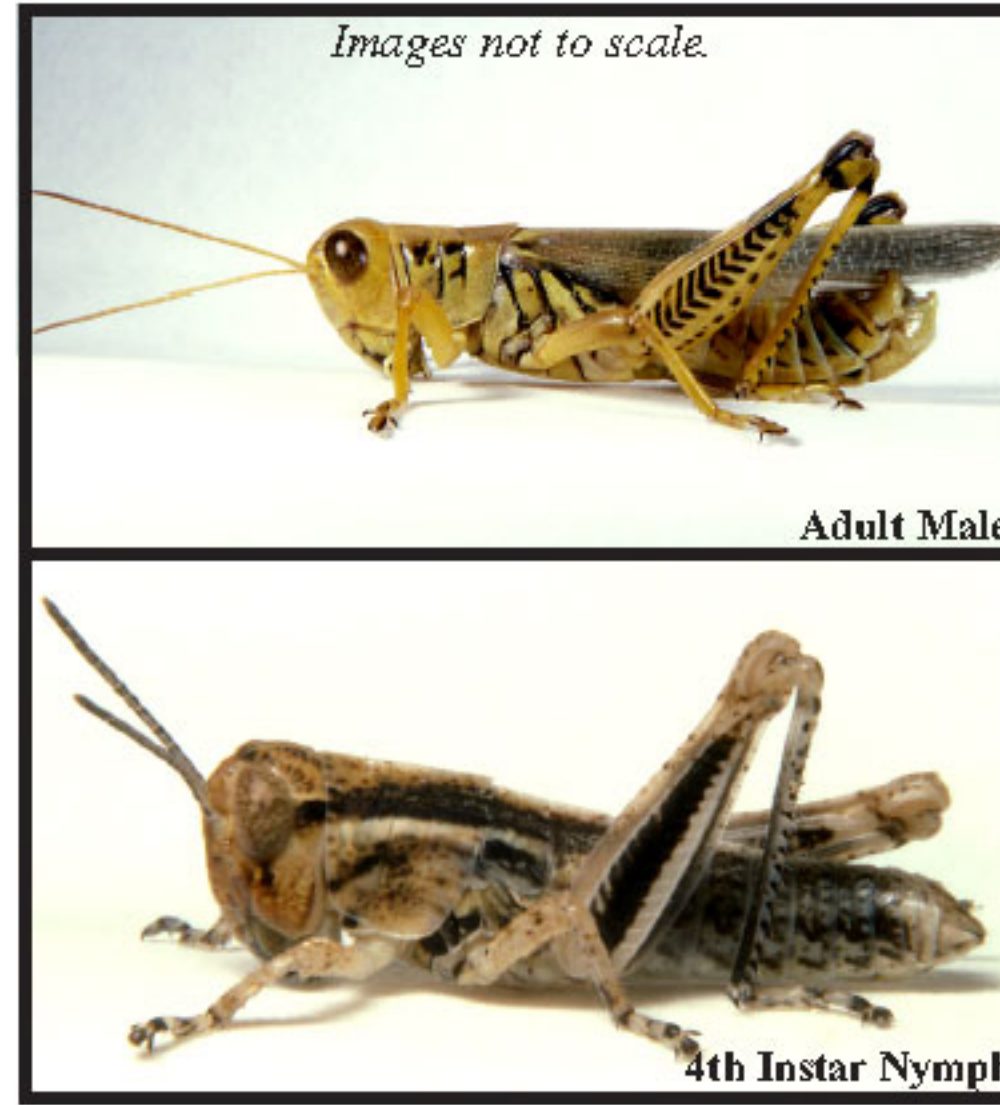
- Body tan or gray with a black band, that has light spots, which broadens and extends from behind eyes across 2/3 of the pronotum (plate behind head).
- Body length: male - 0.9 in., female - 1.0 in.
- Lower part of hind legs is blue-green or reddish.

Nymph Identification

- Body tan or gray.
- Length of 4th instar nymph: 0.4 in.
- Head has a black stripe behind eyes and a narrow pale yellow crescent below eyes that both continue across the pronotum.
- Upper part of hind legs has a broken black lengthwise stripe.
- Lower part of hind legs is blue-green or reddish.

Differential Grasshopper

Melanoplus differentialis



Facts

- Severe pest of small grains, corn, soybeans, alfalfa and vegetables.
- Feeds on forbs and grasses by climbing on plants and consuming leaves.
- Begins to hatch in early June.
- Lays eggs in soil among grass or weeds.

Adult Identification

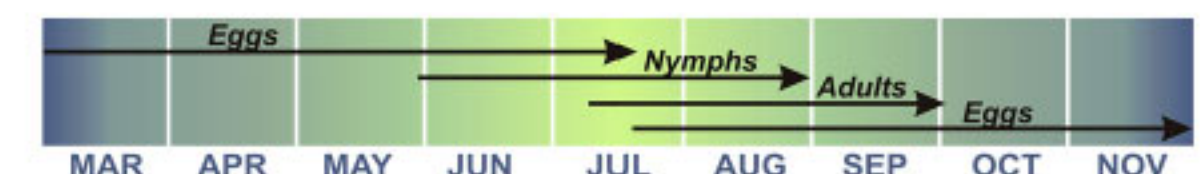
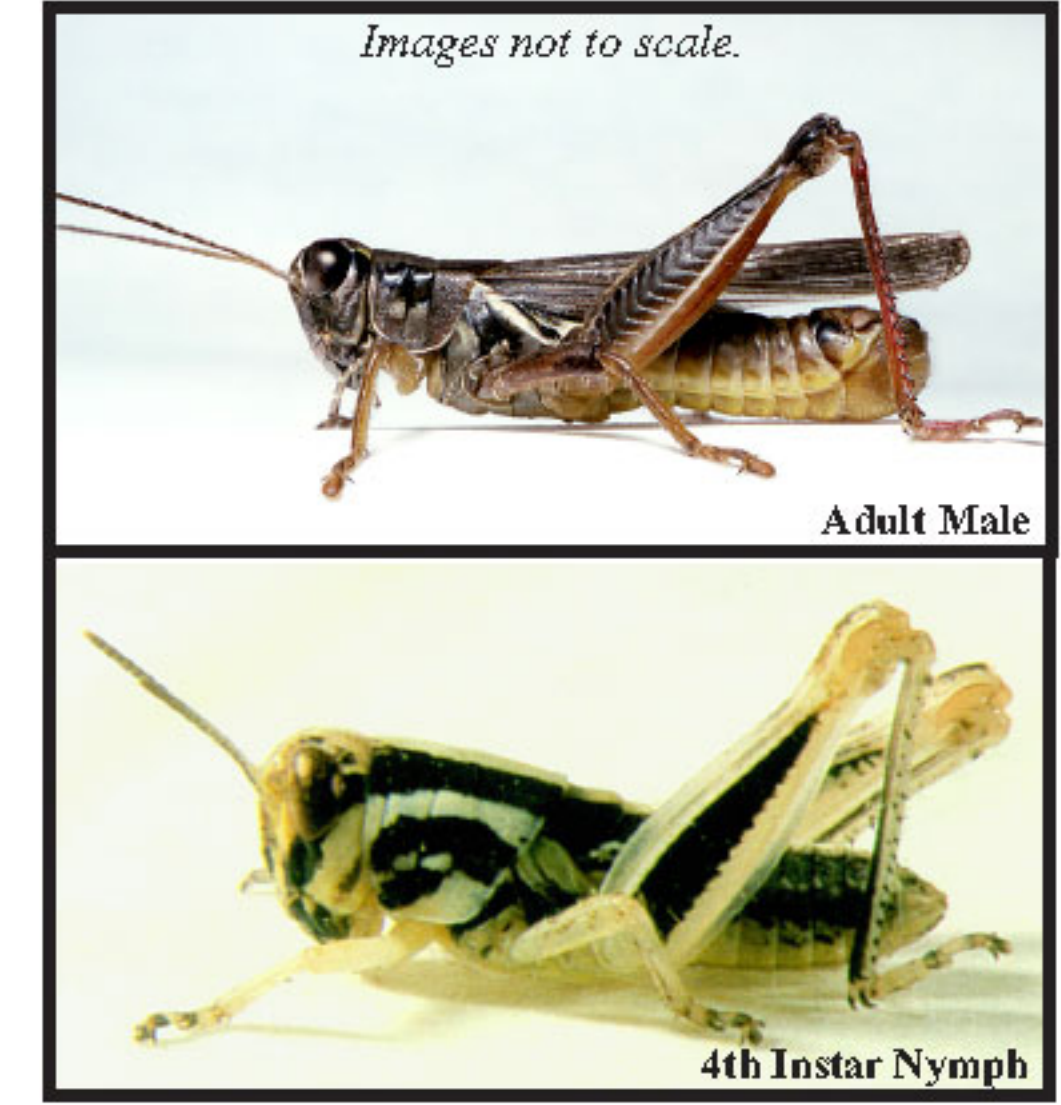
- Body yellow with black markings.
- Body length: male - 1.0 in., female - 1.25 in.
- Upper part of hind legs has a series of chevron-like markings.

Nymph Identification

- Body pale green, pale yellow or tan.
- Body length of 4th instar nymph: 0.5 in.
- Side of pronotum (plate behind head), near the top, has two dark horizontal stripes divided by a light stripe.
- Upper part of hind legs has a dark lengthwise stripe.

Redlegged Grasshopper

Melanoplus femurrubrum



Facts

- Severe pest of small grains, alfalfa, clover, corn, soybeans and vegetables.
- Favors low, moist, weedy areas.
- Feeds on forbs and grasses by climbing on plants and consuming leaves.
- Begins to hatch in early June.
- Lays eggs in soil under grass sod.

Adult Identification

- Body dark tan with a bright yellow underside.
- Body length: male - 0.8 in., female - 1.0 in.
- Lower part of hind legs is bright red.

Nymph Identification

- Body yellow with black markings.
- Body length of 4th instar nymph: 0.4 in.
- Side of head has a pale yellow crescent band that continues across pronotum (plate behind head) to front of abdomen.
- Top of head has a pale yellow stripe, flanked by black stripes, that continue down the length of the body.
- Upper part of hind legs has a dark lengthwise stripe.

Two-striped Grasshopper

Melanoplus bivittatus



Facts

- One of the largest Nebraska grasshoppers.
- Severe pest of small grains, alfalfa, corn, and sunflowers.
- Feeds on forbs and grasses by climbing on plants, consuming leaves and clipping them off.
- Begins to hatch in early May.
- Lays eggs in ditch banks and compact drift soil.

Adult Identification

- Body tan with two light yellow stripes running down the top of the head, pronotum (plate behind head) and base of forewings.
- Body length: male - 1.1 in., female - 1.5 in.

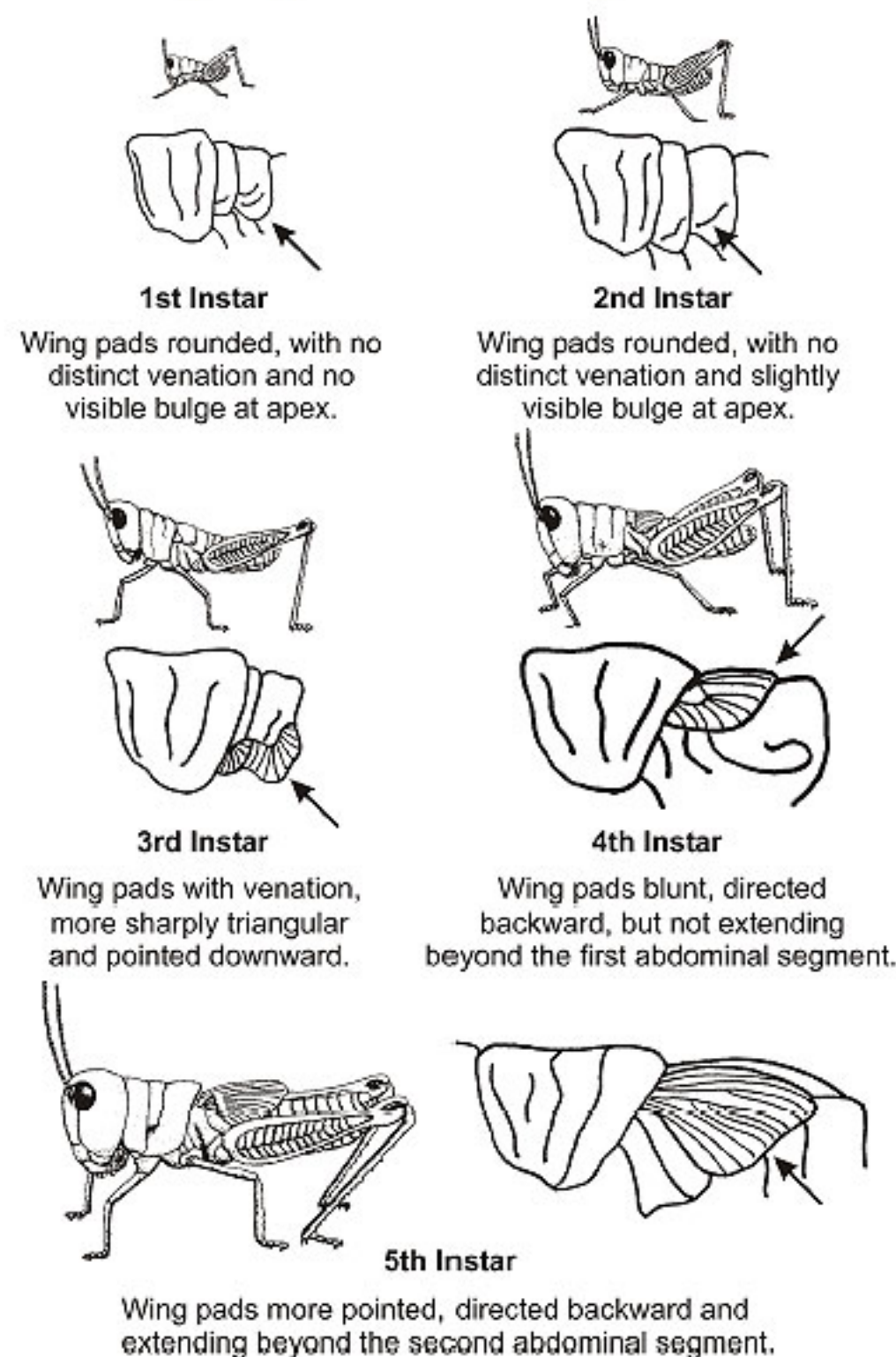
Nymph Identification

- Body green or tan.
- Body length of 4th instar nymph: 0.6 in.
- Side of head has a dark horizontal band above a light stripe from the eye across the pronotum.
- Upper part of the hind legs has a black lengthwise stripe.

Biology and Management

Summer feeding grasshoppers can cause severe damage to nearly all crops when they are abundant in field borders. Identification of the grasshoppers present is important because only four species are likely to cause significant crop damage. These four species are spur-throated grasshoppers that have a rounded head and a spur between their front legs. They are more common in weed-infested field borders and weedy adjacent pastures, but will move to cropland after consuming most of the weeds. Summer feeding grasshoppers overwinter as eggs and hatch through much of May and June. Identification of the nymphal development stage is important because control efforts are most effective when the 3rd and 4th instar stages are targeted. Control efforts should begin while nymphs are concentrated in field borders and before they move to cropland.

Nymph Development



Acknowledgments: Our thanks to Dr. Robert E. Pfadt (retired), Dr. Jeff Lockwood and Scott Schell of the University of Wyoming and the USDA for graphics used in this publication. Financial support for this guide was provided by a grant from USDA Animal and Plant Health Inspection Service.

GRASSHOPPER IDENTIFICATION GUIDE

for Cropland Grasshoppers Summer Feeding Species

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Elbert C. Dickey, Dean and Director of Cooperative Extension, University of Nebraska, Institute of Agriculture and Natural Resources.

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