GRASSHOPPER IDENTIFICATION GUIDE
for
Rangeland Grasshoppers
Fall/Spring-Feeding Species

Ron Seymour
Extension Educator, Adams County

Jack Campbell
Extension Entomology Specialist
West Central Research & Extension Center

Gary Hein
Professor, Department of Entomology

Jim Kalisch
Extension Associate, Department of Entomology

Threebanded Grasshopper
Hadrotettix trifasciatus

Facts
• Large bandwinged species, males make a crackling sound when they fly.
• Feeds on poor forage and poisonous plants as well as forage grasses.
• Usually found on hilltops and slopes.
• Eggs hatch in early May.

Adult Identification
• Tan with a round head and long antennae.
• Hind wings light yellow with an outer dark band.
• Fore wings with three dark bands across width.
• Body length: females - 1.25 inches, males 1 inch.

Immature Identification
• Tan with large, round head and long antennae.
• Hind legs have a dark brown band across them.
• 4th instar nymph body length: 0.75 inch.

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.

Biology and Management
On rare occasions, high populations of early season range grasshoppers coincide with slow growth of spring grass, causing economic loss. Most early season range grasshoppers overwinter in the nymphal stage. These grasshoppers survive by hiding under debris and organic matter. These nymphs, along with a few very early hatching species, feed on cool-season grasses as soon as they begin to green up. Several species can cause early season feeding damage, some more seriously than others; thus, identification is important. Nymphs are easier to control than adults because they are smaller and wingless. Identification of the nymphal development stage is important because control efforts should target the 3rd and 4th instar stages.

Nymph Development

Images not to scale.

Threebanded Grasshopper
Hadrotettix trifasciatus

EC1567
(Revised December 2009)
Specklewinged Grasshopper
*Arphia conspersa*

**Facts**
- A small grasshopper with a slant-faced head.
- Hatches in July and overwinters as a 3rd or 4th instar nymph.
- Feeds on grasses and sedges by clipping blades near the base; often cuts more than it consumes.

**Adult Identification**
- Tan with brown or brown-green markings the length of the body.
- Body length: females - 0.9 inch, males - 0.6 inch.
- Both top of head and pronotum (plate behind head) has three ridges down the length.
- Side ridges of pronotum cream-colored and constricted near the middle.

**Immature Identification**
- Dark brown with brown speckles.
- 4th instar nymph body length: 0.5 inch.
- Head large and round; pronotum has a ridge down the middle.

---

Redshanked Grasshopper
*Xanthippus corallipes*

**Facts**
- The largest bandwinged grasshopper, it can fly more than 30 feet while making a crackling sound.
- Hatches in late July and overwinters as 5th and 6th instar nymphs.
- Feeds on grasses and sedges by clipping blades near the base; often cuts more than it consumes.

**Adult Identification**
- Brown, forewings with large brown spots.
- Hind wings yellow with dark bands.
- Inner side of legs have a red coloration.
- Body length: females - 1.5 inches, males - 1 inch.
- The head is rounded; pronotum (plate behind head) has a ridge down the middle.

**Immature Identification**
- Dark brown with brown speckles.
- 4th instar nymph body length: 0.4 inch.
- Head large and round; pronotum has a ridge down the middle.

---

Velvetstriped Grasshopper
*Eritettix simplex*

**Facts**
- A small grasshopper with a slant-faced head.
- Hatches in July and overwinters as a 3rd or 4th instar nymph.
- Feeds on grasses and sedges by clipping blades near the base; often cuts more than it consumes.
- Seldom reaches economically damaging numbers.

**Adult Identification**
- Tan with brown or brown-green markings the length of the body.
- Body length: females - 0.9 inch, males - 0.6 inch.
- Both top of head and pronotum (plate behind head) has three ridges down their length.
- Side ridges of pronotum cream-colored and constricted near the middle.

**Immature Identification**
- Pale tan to green with brown side bands near top of head and pronotum.
- 4th instar nymph body length: 0.4 inch.
- Slanted face and head with three ridges continuing down the body.