GRASSHOPPER IDENTIFICATION

Hieroglyphus banian

Order: Orthoptera

Family: Acrididae

Genus: Hieroglyphus

Species: banian

Economic importance - Damage is caused by both adults and nymphs. They are polyphagous pest. The greatest amount of damage is caused during August-September when both adults and nymphs feed on paddy and other crops, causing defoliation.

Life cycle - The female starts laying eggs by inserting her abdomen in the soil. The eggs are laid 5-8 cm deep in pods each containing 30-40 eggs.



Neconocephalus exiliscanorus

Order: Orthoptera - Grasshoppers, Crickets, Katydids

Suborder: Ensifera - Long-horned Orthoptera

Infraorder: Tettigoniidea - Katydids, Camel Crickets, and relatives

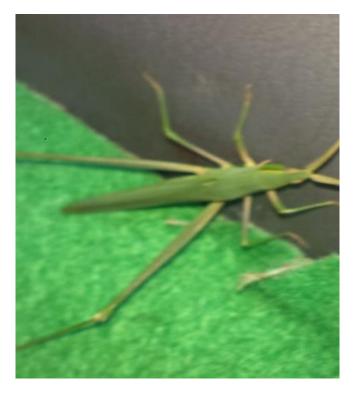
Family: **Tettigoniidae – Katydids**

Subfamily: Conocephalinae – Coneheads and Meadow Katydids

Tribe: Copiphorini - Coneheads

Genus: Neoconocephalus - Common Coneheads

Species: exiliscanorus - Slightly Musical Conehead



Identification - The cone head with the longest cone: 4-6 mm, measured from the ventral tooth to the tip. Ovipositor 35-50 mm. Length 49-66 mm for males and 53-74 for females.

Habitat - Wet or moist thickets, canebrakes, cattail marshes, along streams in forests, cornfields.

Life history - Eggs are reported as being laid in grass blades. There is presumably only a single generation each year. Overwintering probably occurs in the egg stage. Adults occur most commonly in August, but they have been found from July until October.

Polichne species

Common name: Small grassland katydid,

Order: Orthoptera

Super family: **Tettigoniidea**

Family: **Tettigoniidae**

Identification - with green and brown forms, slander bod. Head to wings tip length 30mm.

Habitat - Grasslands

Habits - Jump and fly to a few metres away when disturbed.



Orchelimum vulgare

Common name: Common meadow katydid

Family: **Tettigoniidae – Katydids**

Subfamily: Conocephalinae - Coneheads and Meadow Katydids

Tribe: Conocephalini - Meadow Katydids

Genus: Orchelimum - Greater Meadow Katydids

Species: vulgare - Common Meadow Katydid

Body size: Medium (male 5-6, female 5.4-6.5 mm).

Identification - Has a rather plain green face, not mottled like most others of its genus. Eyes red. Typically long-winged. Has two black lines on "dorsal shield".

Habitat - Meadows, marshes, and upland fields.

Life history - Univoltine, with wintering in the egg stage. Nymphs hatch in Mayor June.

Adults appear in late July and August. Oviposition may continue through September into October, or until the insects are killed by frost.

Economic importance - Damage is caused by oviposition in the stems, the stems eventually breaking at an oviposition scar. Nymphs feed upon plant foliage but seldom cause noticeable injury.



Hesperotettix speciosus

Order: Orthoptera (Grasshoppers, Crickets, Katydids)

Suborder: Caelifera (Grasshoppers)

Family: Acrididae (Short-horned Grasshoppers)

Subfamily: Melanoplinae (Spur-throated Grasshoppers)

Tribe: **Dactylotini**

Genus: **Hesperotettix**

Species: speciosus (Showy Grasshopper)

Identification - Bright finely mottled green (rarely brown), usually with a purplish red to pink stripe down the middle of the back, and similar colouring on the legs.

Habitat - Mostly disturbed areas where course annual composites grow. Especially old fields, field margins, roadsides, etc.

Economic Importance - Because of its preference for weedy forbs, it is unlikely to be a pest of rangeland, and might be considered beneficial in its preference for weedy species.

Migratory Habits - As this grasshopper possesses wings which are usually shorter than the abdomen, it is apparently incapable of flight. Dispersal is likely limited to local areas.

Life Cycle - Overwinters as eggs and adults summer until frost.



Melanoplus bivittatus

Order: Orthoptera

Family: Acrididae

Subfamily: Melanoplinae

Genus: Melanoplus

Species: M. bivittatus

Identification - A relatively large species, its size ranges from 30 to 55 mm. A pair of pale yellow stripes running along the top of it body from above its eyes to the hind tip of its wings identify this species.



Habitat - Varies with region, but usually relatively moist, lush, weedy or meadow areas. Meadows, prairies, crop fields, road sides, vacant lots, ditch and stream sides, etc.

Season - June to October.

Food - Wide variety of mostly herbaceous Dicots, but will often also eat herbaceous monots, leaves of woody plants, will scavenge dead animal matter, etc.

Life Cycle - Overwinters as eggs laid mostly in ground, but sometimes in manure, rotting wood, holes in rocks, etc. Adults in late spring usually live until frost if not eaten or killed by disease. Often colour darkens noticeably as cool autumn weather sets in.

Economic importance - It prefers lush foliage such as many of the weed species found associated with marshes and roadside ditches. It is often a pest of alfalfa and other crops. Occasionally, it may feed extensively on some of the trees commonly used as shelterbelts.

Conocephalus fasciatus

Common name: Slender Meadow Katydid

Order: Orthoptera (Grasshoppers, Crickets, Katydids)

Suborder: Ensifera (Long-horned Orthoptera)

Infraorder: Tettigoniidea (Katydids, Camel Crickets, and relatives)

Family: Tettigoniidae (Katydids)

Subfamily: Conocephalinae (Cone heads and Meadow Katydids)

Tribe: Conocephalini (Meadow Katydids)

Genus: Conocephalus (Lesser Meadow Katydids)

Species: fasciatus (Slender Meadow Katydid)



Identification - Forewings are longer than abdomen, hind wings exceed forewings by 2-3 mm. Cerci of male are green.

Habitat - Grassy areas in fields, meadows, open woodlands.

Season - Mid-summer to fall. Reported July-October

Economic importance - Reported to cause injury to field corn by this species. The male flowers were favoured. It cannot, however, be regarded as more than a sporadic and very minor pest.

Eritettix simplex tricarinatus

Common name: Velvet-striped grasshopper

Order: Orthoptera (Grasshoppers, Crickets, Katydids)

Suborder: Caelifera (Grasshoppers)

Family: Acrididae (Short-horned Grasshoppers)

Subfamily: Gomphocerinae (Slant-faced Grasshoppers)

No Taxon: (Amblytropidia Group)

Genus: Eritettix

Species: simplex (Velvet-striped Grasshopper)

Identification - Body greyish. Male head and pronotum with pair of narrow dark lines dorsally; female grey with contrasting dark and white markings. Lateral carinae of pronotum only slightly constricted.

Habitat - The slant-faced grasshoppers are usually found along the borders of marshes and in wet meadows. However, some members of this group are also common in dry, grassy fields and pastures. The slant-faced grasshoppers feed primarily on rangeland grasses and sedges. They are seldom associated with cultivated crops. Slant-faced grasshoppers have "teeth" or spines that are used for "singing."

Food - Primarily grasses.



Life Cycle - Overwinters as roughly 3rd to 5th instar nymphs. Adults mature in late winter or early spring and are mostly gone by summer. There is some evidence that there may be a later generation which may be derived from spring hatching eggs, with nymphs and adults present in summer and some adults living into autumn. Eggs are laid in soil, mostly in spring.

Polichne species

Common name: Small grassland katydid

Order: Orthoptera (Grasshoppers, Crickets, Katydids)

Suborder: Caelifera (Grasshoppers)

Family: **Tettigoniidae**

Identification - This katydid is relatively small in size. Some are in grass green colour and some are in dry grass brown colour, looking same.

Life cycle - In this family, nymphs are usually resemble ants or bugs. Females have sword-like ovipositor and lay eggs by inserted them into leaf. Males produce love songs by file on the left wing and scraper on the right.

Feeding habit - Most of them are tree foliage feeders. A few of them are predaceous species.

