

A New Species of Gall Midge (Cecidomyiidae) from *Hebe salicifolia* Forst. Leaf Galls

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LEAF galls on *Hebe salicifolia* Forst. collected from Mayor Island, New Zealand, in November, 1948, by the Auckland University College Field Club were found to contain typical gall-midge larvae. Adults bred from the galls in December, 1948, were found to belong to the genus *Dasyneura* (s.l.) and are described below as a new species. Similar leaf galls have since been collected from Rangitoto Island and from the grounds of Auckland University College.

The gall takes the form of a smooth swelling along the main vein of the leaf. Usually oval in shape, the swelling is apparent from both sides of the leaf, though it is more pronounced on the lower (abaxial) surface (Fig. 1). Mature galls are about 8 mm. wide, 10 mm. long and 4 mm. thick. The length of the gall depends upon the number of larvae present. While immature galls are smooth and lack any apertures, mature galls bear a single row of exit holes on either side of the lower surface. Often empty pupal cases are found in these exit holes. Galls are usually polythalamous and contain several white larvae of the usual cecidomyid type, each with a brown, anteriorly bifid sternal process. A stem gall which commonly occurs on *Hebe salicifolia* is quite distinct from the leaf gall and is caused by a different species of gall midge.

Dasyneura hebefolia sp. n

Male: Length about 1.6 mm. Antennae 2 + 15; first and second flagellar segments more or less cylindrical with a short neck; the neck of the third flagellar segment twice as long as wide and two-thirds as long as the spherical basal enlargement; the neck of the fifth flagellar segment twice as long as wide and almost half as long as the basal enlargement, the latter slightly wider than long; the neck of the tenth flagellar segment three times as long as wide and almost two-thirds as long as the more or less spherical basal enlargement; penultimate and terminal segments not entirely separated; terminal segment broadly conical. Palpi: four segmented; basal segment quadrate, second segment twice as long as wide; third segment about $2\frac{1}{2}$ times as long as wide; the fourth segment about five times as long as wide, slightly longer and narrower than the third. Thorax: brown. Wings: the third vein reaches the margin just before the apex of the wing; fifth vein forked. Legs scaled; claws moderately curved, all toothed; empodium slightly longer than the claws. Genitalia (see Fig. 2); basal clasp segment short, stout, slightly swollen; distal clasp segment moderately curved, stout at base, tapering gradually to about one-third; dorsal lamella with wide U-shaped emargination, each lobe wide

and rounded; ventral lamella almost as long as dorsal lamella, shallow U-shaped emargination; style just longer than lamellae; harpes or ventral appendages about same length as ventral lamella, rather narrow, distal edge not smooth, with a prominence.

Holotype: Cecid. 5167, located in the Barnes Collection, England.

Paratype: Cecid. 5168, located in the collection of the Plant Diseases Division, Department of Scientific and Industrial Research, New Zealand.

Female: Length about 1.8 mm. Antennae 2 + 14–15, flagellar segments cylindrical with transverse necks; third flagellar segment three-fifths as wide as long; fifth flagellar segment very slightly shorter

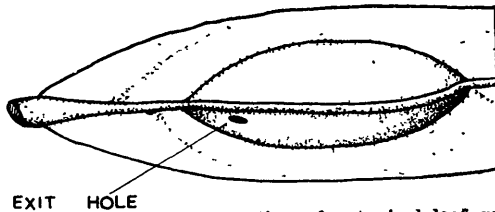
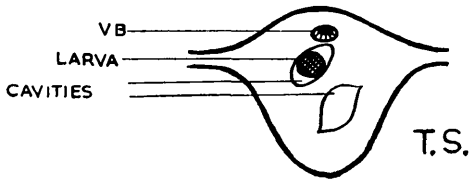


FIG. 1—*Above*: A transverse section of a typical leaf gall. V.B., vascular bundle. *Below*: Portion of abaxial surface of leaf showing a typical gall.

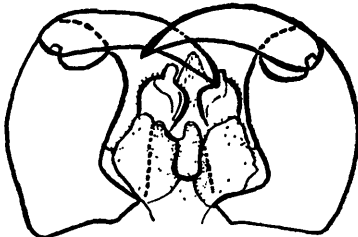


FIG. 2—Male genitalia of *Dasyneura hebefolia*.

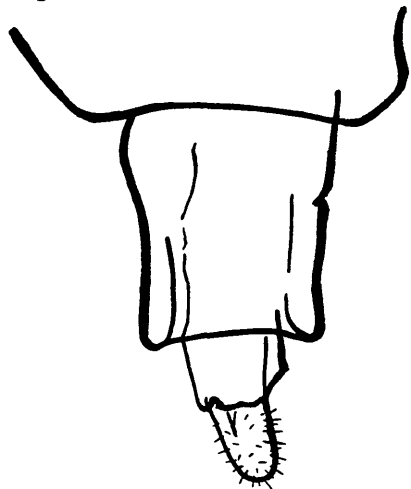


FIG. 3—Female genitalia of *Dasyneura hebefolia*. (All by author)

and narrower; tenth flagellar segment slightly shorter and narrower than the fifth; terminal segment incompletely separated, the combined segments five times as long as wide. Palpi: four segmented; segment one quadrate; second segment twice as long as wide; third segment narrower and slightly longer than the preceding segment; segment four longer and narrower than the preceding segment. Thorax brown; claws all toothed and moderately curved. Abdomen: red when alive. Ovipositor pocket-shaped (see Fig. 3).

Allotype: Cecid. 5173, Barnes Collection, England.

Paratypes: 2 specimens in the collection of the Plant Diseases Division, Department of Scientific and Industrial Research, Auckland, New Zealand.

Other specimens in the Barnes Collection are: males Cecid. 5163-6, females Cecid. 5169, 5170-2, 5174-5.

Parasite: A small, iridescent green parasite, identified by Mr. G. J. Kerrich, of the British Museum, as *Lioterphus* sp. (Hymenoptera: Torymidae), was bred in large numbers from the Mayor Island gall midges.

ACKNOWLEDGMENT

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