

**Host Records of *Philaenus spumarius* (Linn.) at Kilauea,  
Hawaii National Park  
(Homoptera: Cercopidae)**

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(Presented at the meeting of August 13, 1945)

The family Cercopidae is represented in Hawaii by the single immigrant species *Philaenus spumarius* (Linn.). This spittle-insect was first seen in the islands by Warren Goolsby, who collected it from daikon (*Raphanus sativus* Linn. *longipinnatus* Bailey) and satsuma orange leaves near the Volcano House, Kilauea, Hawaii, on January 17, 1944 (Proc. Haw. Ent. Soc., 12: 219, 1945; as *P. leucophthalmus* [Linn.]). Herbert Osborn (Meadow and Pasture Insects: 101, 1939) states that *P. spumarius* "is a very widely distributed species both in Europe and America, and in the United States and Canada occupies a large area from the Atlantic coast to the plains regions." It probably reached Hawaii from the mainland of the United States on imported plant material in recent years. The present authors have observed it abundantly in Kipuka Puauulu (Bird Park), the administrative and residential area, Kipuka Ki, at the Hilo entrance to the park, and at the Kilauea Ranger Station (29 miles).

Nymphs immersed in froth have been commonly found on leaves and stems of a large number of different plants, though no injury to the infested plants has been observed. The adults are often found on vegetation near the infested foliage, or on the same plants occupied by the nymphs. A record has been kept of all plants on which the authors have observed froth masses. This is given below.

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Host	LOCATION	DATE
<i>Saccollepis contracta</i>	Nursery	Jan. 30, 1945
<i>Centaurium umbellatum</i>	Nursery	Jan. 30
<i>Ilex anomala</i> §	Crater Rim Road	Jan. 30
<i>Hibiscus tiliaceus</i> §	Nursery	Jan. 30
<i>Hypochoeris radicata</i>	Hilo entrance	April 3
<i>Rubus penetrans</i> *†	Hilo entrance	April 3
<i>Digitaria pruriens</i>	Hilo entrance	April 3
<i>Trifolium procumbens</i>	Hilo entrance	April 3
<i>Plantago lanceolata</i>	Hilo entrance	April 3
<i>Geranium carolinianum</i> var. <i>australe</i> *†	Hilo entrance.	April 3
<i>Verbena litoralis</i> †	Hilo entrance	April 3
<i>Mentha</i> sp.†	Kipuka Puauulu	April 3

\* Previously recorded by N. L. H. Krauss (Proc. Haw. Ent. Soc., 12:220, 1945).

† Preferred host.

§ Indigenous host.

Host	LOCATION	DATE
<i>Brassica oleracea</i> var. <i>botrytis</i>	Quarters 22	April 17
<i>Lactuca sativa</i>	Quarters 22	April 17
<i>Medicago hispida</i>	Quarters 31	May 11
<i>Mesembryanthemum</i> sp.*	Quarters 31	May 11
<i>Senecio mikanioides</i>	Quarters 31	May 11
<i>Tibouchina semidecandra</i>	Quarters 31	May 11
<i>Gnaphalium purpureum</i>	Quarters 31	May 11
<i>Dianthus chinensis</i>	Quarters 31	May 11
<i>Coprosma rhynchocarpa</i> *§	Kipuka Puaulu	May 15
<i>Veronica plebeia</i>	Kipuka Puaulu	May 15
<i>Modiola caroliniana</i>	Kipuka Puaulu	May 15
<i>Commelina diffusa</i>	Kilauea ranger sta.	May 17
<i>Chrysanthemum maximum</i>	Kilauea ranger sta.	May 17
<i>Vinca</i> sp.	Kilauea ranger sta.	May 17
<i>Panicum purpurascens</i>	Kilauea ranger sta.	May 17
<i>Sonchus oleraceus</i>	Kilauea ranger sta.	May 17
<i>Tritonia crocosmaeflora</i>	Kilauea ranger sta.	May 17
<i>Erigeron albidus</i>	Headquarters bldg.	May 18
<i>Oenothera striata</i>	Observatory	May 18
<i>Cordyline terminalis</i>	Quarters 20	May 19
<i>Myosotis azorica</i>	Quarters 7	May 20
<i>Cyperus brevifolius</i>	Quarters 7	May 20
<i>Cynodon dactylon</i>	Quarters 7	May 20
<i>Hebe salicifolia</i>	Quarters 7	May 20
<i>Anagallis arvensis</i>	Kipuka Puaulu	May 21
<i>Dactylis glomerata</i>	Kipuka Ki	May 26
<i>Rheum rhaponticum</i>	Quarters 21	May 27
<i>Holcus lanatus</i>	Kipuka Puaulu	May 31
<i>Lythrum maritimum</i>	Residential area	June 11
<i>Fuchsia magellanica</i> *	29 Miles	June 11
<i>Wikstroemia phillyreaefolia</i> §	Nursery	June 13
<i>Raillardia scabra</i> §	Nursery	June 13
<i>Coprosma ernodeoides</i> var. <i>typica</i> §	Nursery	June 13
<i>Artemisia vulgaris</i>	Adm. area	June 29
<i>Dahlia</i> sp.	Quarters 22	July 2
<i>Hypericum moserianum</i>	Quarters 2	July 4
<i>Pastinaca sativa</i>	CCC camp	July 11
<i>Coix lacryma-jobi</i>	CCC camp	July 11
<i>Solidago altissima</i>	Residential area	Sept. 1
<i>Physalis peruviana</i> *	CCC camp	Oct. 9
<i>Bidens pilosa</i> var. <i>minor</i>	Quarters 22	Oct. 13
<i>Rumex acetosella</i>	Quarters 22	Oct. 13
<i>Daucus carota</i> var. <i>sativa</i>	Quarters 21	Oct. 23
<i>Ipomoea batatas</i>	Quarters 22	Nov. 1
<i>Pluchea odorata</i>	CCC camp	Dec. 31
<i>Metrosideros collina</i> var. <i>polymorpha</i> §	Nursery	Jan. 10, 1946

\* Previously recorded by N. L. H. Krauss (Proc. Haw. Ent. Soc., 12:220, 1945).

§ Indigenous host.