

The Host Trees of the Endemic Cerambycidae in Hawaii

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(Presented at the meeting of May 7, 1931)

At the present time there are known 82 species and 4 varieties of endemic Cerambycidae in the Hawaiian Islands. They are distributed in the following genera: *Plagithmysus*, 49 species and 2 varieties; *Nesithmysus*, 4 species; *Aeschrithmysus*, 2 species; *Callithmysus*, 2 species and 1 variety; *Neoclytarlus*, 22 species and 1 variety; *Paraclytarlus*, 3 species. The descriptions of these are somewhat scattered, and many of them have no definite reference to their host trees. There are scattered notes recording habits of some of them later than the time of description. It seems desirable for convenient reference for those making further studies of this group of beetles, to have a list of all species together with their hosts so far as known. The following list also cites the description, synonymy, collector and the island on which the species occurs. So far, no species is known to occur on more than one island. The list is arranged in chronological order according to dates of descriptions. A few host and locality records have been added while this paper was in press.

***Plagithmysus pulverulentus* (Motsch.).**

Stenopterus pulverulentus Motschoulsky, Bull. Mosc., XVIII, I, p. 85, Pl. I, f. 12, 1845.

Plagithmysus pulverulentus Motsch., Bull. Mosc., XVIII, II, p. 370, Pl. VII, f. 7, 1845.

Plagithmysus pulverulentus, Sharp, Ent. Mo. Mag., (2), VII, p. 242, 1896.

Clytarlus robustus Sharp, Trans. Ent. Soc., London, p. 206, 1878.

Plagithmysus pulverulentus, Sharp, Fauna Hawaiiensis, II, p. 107, 1900.

Generally distributed on OAHU. Collected from *Acacia koa* by Blackburn and Perkins. Bred from the same tree by Swezey, Bridwell and Hadden. Oahu (Koebele); Wailupe (Bridwell); Tantalus (Giffard).

***Plagithmysus cristatus* (Sharp).**

Clytus attenuatus Boisd., Voy. Astrol., Ins. II, p. 485, 1835.

Clytarlus cristatus Sharp, Trans. Ent. Soc., London, p. 207, 1878.

Plagithmysus cristatus Sharp, Ent. Mo. Mag., (2) VII, p. 274, 1896.

Proc. Haw. Ent. Soc., VIII, No. 1, Nov., 1932.

Plagithmysus cristatus Sharp, Fauna Hawaiiensis, II, p. 113, 1900.
Callithmysus cristatus Sharp, Fauna Hawaiiensis, III, p. 650, 1910.
Plagithmysus cristatus, Perkins, Proc. Haw. Ent. Soc., VI, p. 479, 1927.

Generally distributed on OAHU. Collected on *Acacia koa* by Blackburn and Perkins. Bred from the same tree by Swezey and Hadden. Oahu (Koebele); Tantalus (Giffard); Palolo, Punaluu (Swezey).

Plagithmysus finschi (Harold).

Clytarus finschi Harold, Mitt. München Ent. Ver., IV, p. 166, 1880.
Plagithmysus finschi, Sharp, Ent. Mo. Mag., (2), VII, p. 242, 1896.
Plagithmysus finschi, Sharp, Fauna Hawaiiensis, II, p. 106, 1900.

Olinda and Haleakala, MAUI. Collected on *Acacia koa* by Blackburn and Perkins. Bred from the same tree by Swezey. Maui (Koebele); Olinda (Giffard and Fullaway).

Plagithmysus pulvillatus (Karsch).

Clytarus pulvillatus Karsch, Berlin Ent. Zeit., XXV, p. 9, Pl. I, f. 14, 1881.
Plagithmysus pulvillatus, Sharp, Fauna Hawaiiensis, II, p. 111, 1900.

"Grove Ranche", MAUI (Karsch). Collected by Perkins on Haleakala, 5,000 ft. Maui, on *Metrosideros polymorpha*.

Plagithmysus blackburni (Sharp).

Clytarus blackburni Sharp, Trans. Dublin Soc., (2), III, p. 195, Pl. V, fig. 47, 1885.
Plagithmysus blackburni Sharp, Ent. Mo. Mag., (2), VII, p. 271, 1896.
Plagithmysus blackburni Sharp, Fauna Hawaiiensis, II, p. 111, 1900.

Kona and Puuwaawaa, HAWAII. Collected on *Sophora chrysophylla* by Perkins and Giffard; by Blackburn on *Acacia falcata* (possibly a misidentification of tree); by Meinecke on *Sophora* on Mauna Kea, and at Humuula on dead *Gouldia*; by Williams and Swezey on *Sophora* at 7,000 feet elevation, Nauhi Gulch, Hawaii, Oct., 1931.

Plagithmysus vitticollis Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 240, 1896.
 Sharp, Fauna Hawaiiensis, II, p. 105, Pl. VI, fig. 5, 1900.

Kilauea, HAWAII (Perkins, Giffard, Swezey). Collected on akala (*Rubus* sp.) by Perkins; on *Perrottetia sandwicensis* by Giffard. Bred from *Rubus hawaiiensis*, Upper Hamakua Ditch trail, Kohala Mts. (Swezey).

Plagithmysus vitticollis var. **longulus** Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 240, 1896.

Sharp, Fauna Hawaiiensis, II, p. 105, 1900.

Puna, HAWAII. Found breeding in *Bobeia elatior* by Perkins. Collected on the same tree at Kilauea by Giffard. Collected at Puna by Newell; Hawaii (Koebele).

Plagithmysus newelli Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 240, 1896.

Sharp, Fauna Hawaiiensis, II, p. 105, Pl. VI, fig. 7, 1900.

Wailuku, MAUI. Collected by Blackburn. Host tree unknown. Haleakala, 4,000 feet (Giffard).

Plagithmysus concolor Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 241, 1896.

Sharp, Fauna Hawaiiensis, II, p. 106, Pl. VI, fig. 8, 1900.

KAUAI. Collected on ohia ha (*Syzygium sandwicense*) by Perkins and oviposition was observed on this tree; collected by Munro at Kaholuamano; Waimea, 3,200 to 4,000 feet, Kaholuamano (Giffard); Kaholuamano, Waialeale trail (Kusche); collected on ohia lehua by Osborn at Kokee. Bred from lehua at Halemanu by Swezey, July, 1932.

Plagithmysus solitarius Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 241, 1896.

Sharp, Fauna Hawaiiensis, II, p. 106, 1900; III, p. 647, 1910.

Mt. Tantalus, Nuuanu, Pupukea, Haleauau, OAHU. Bred from *Syzygium sandwicense* by Perkins and Swezey; and from *Elaeocarpus bifidus* by Swezey and Hadden; on Tantalus, once bred from *Metrosideros polymorpha* by Perkins; Oahu (Koebele); Lanihuli (Bryan). Bred from lehua in Mohiakea Valley, Waianae Mountains, by Swezey, Sept., 1932.

Plagithmysus cuneatus Sharp.

Sharp Ent. Mo. Mag., (2), VII, p. 241, 1896.

Sharp, Fauna Hawaiiensis, II, p. 106, Pl. VI, fig. 9, 1900.

Kaala, OAHU. Collected by Perkins on an unknown tree; collected by Forbes on *Sapindus oahuensis* at Wailupe. Bred from the same tree at Niu by Swezey and Williams, March, 1932.

Plagithmysus bishopi Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 242, 1896.

Sharp, Fauna Hawaiiensis, II, p. 108, Pl. VI, fig. 12, 1900; F. H., Int., p. lxxviii, 1913.

Kilauea, HAWAII. Bred by Perkins from *Pelea cinerea* and *Xanthoxylum dipetalum* var. *geminicarpum*; collected from the same trees by Giffard; also collected by Giffard on *Pelea zahlbruckneri*, *Straussia* sp. and *Acacia koa*.

Plagithmysus bishopi var. *gracilis* Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 243, 1896.

Sharp, Fauna Hawaiiensis, II, p. 108, 1900.

Kilauea, HAWAII. Collected by Perkins from a tree resembling pua (*Osmanthus sandwicensis*).

Plagithmysus vicinus Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 243, 1896.

Sharp, Fauna Hawaiiensis, II, p. 108, 1900; F. H., Int., p. lxxviii, 1913.

Western side of Mauna Loa, HAWAII. Collected from a different species of *Pelea* than that from which *bishopi* was bred.

Plagithmysus bilineatus Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 243, 1896.

Sharp, Fauna Hawaiiensis, II, p. 108, Pl. VI, fig. 14, 1900.

Kilauea, Puna and Kona, HAWAII. Collected on ohia lehua (*Metrosideros polymorpha*) by Perkins; collected on the same tree at Kilauea by Giffard.

Plagithmysus lanaiensis Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 244, 1896.

Sharp, Fauna Hawaiiensis, II, p. 108, 1900.

Halepaakai, LANAI. Collected by Perkins and said to be probably attached to ohia lehua.

Plagithmysus perkinsi Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 244, 1896.

Sharp, Fauna Hawaiiensis, II, p. 109, Pl. VI, fig. 15, 1900.

Mauna Loa and Kilauea, HAWAII. Collected on *Myoporum sandwicense* by Perkins and Giffard; bred from the same tree by Giffard and Swezey. Bred from the same tree at Nauhi Gulch, 6,000 ft., by Swezey, Sept., 1931.

Plagithmysus varians Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 245, 1896.

Sharp, Fauna Hawaiiensis, II, p. 109, 1900.

Mauna Loa and Kilauea, HAWAII. Collected very abundantly from *Acacia koa* by Perkins and Giffard; bred from the same tree by Swezey at Nauhi, 5,250 feet elevation, Oct., 1931.

Plagithmysus darwinianus Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 271, 1896.

Sharp, Fauna Hawaiiensis, II, p. 109, Pl. VI, fig. 16, 1900; F. H., Int., p. lxxvii, 1913.

Kilauea, HAWAII. Collected on mamani (*Sophora chryso-phylla*) by Perkins and Giffard; ten specimens collected on fallen *Sapindus saponaria* tree, September 28, 1913, by Swezey. Not known to breed in this latter tree.

Plagithmysus sulphureus Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 271, 1896.

Sharp, Fauna Hawaiiensis, II, p. 111, Pl. VI, fig. 17,* 1900.

Kilauea, HAWAII. Collected by Perkins from an unknown tree. Later recorded as breeding in *Urera*.

Plagithmysus specularis Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 272, 1896.

Sharp, Fauna Hawaiiensis, II, p. 111, 1900.

Iao Valley, MAUI. Collected by Perkins. Host tree not known.

Plagithmysus aestivus Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 272, 1896.

Sharp, Fauna Hawaiiensis, II, p. 111, 1900.

MOLOKAI. Collected by Perkins on ohia lehua (*Metrosideros polymorpha*); on the same tree by Giffard at Kalamaula, Molokai.

Plagithmysus funebris Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 273, 1896.

Sharp, Fauna Hawaiiensis, II, p. 106, Pl. VI, fig. 10, 1900.

Haleakala, MAUI. Collected by Perkins on *Sophora chryso-phylla*; bred from the same tree in 1927 by Swezey; Maui (Koebele); south slope of Haleakala (Forbes).

Plagithmysus aequalis Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 273, 1896.

Sharp, Fauna Hawaiiensis, II, p. 112, 1900.

Makaweli, Waimea, Kaholuamano, KAUAI. Collected by Perkins on *Acacia koa*; Kaholuamano (Giffard); Kaholuamano, Waialeale trail, Waialae Falls (Kusche).

* This figure was later designated as *P. giffardi* (Proc. Haw. Ent. Soc., IV, p. 495, 1921).

Plagithmysus arachnipes Sharp.

Sharp, Ent. Mo. Mag., (2), VII, p. 274, 1896.

Sharp, Fauna Hawaiiensis, II, p. 112, Pl. VI, fig. 20, 1900.

KAUAI. Collected on *Acacia koa* by Perkins; Kauai, 4,000 feet (Kusche). Bred from koa at Halemanu by Swezey, July, 1932.

Plagithmysus albertisi Sharp.

Sharp, Ent. Mo. Mag., (2), VIII, p. 12, 1897.

Sharp, Fauna Hawaiiensis, II, p. 110, Pl. VI, fig. 18, 1900.

West Honolulu, OAHU. Collected by Signor d'Albertis, 1874. Host tree not known.

Plagithmysus permundus Sharp.

Sharp, Fauna Hawaiiensis, II, p. 105, 1900.

KAUAI, 2,000 ft. Collected by Perkins on ahakea (*Bobea elatior*).

Plagithmysus diana Sharp.

Sharp, Fauna Hawaiiensis, II, p. 107, Pl. VI, fig. 11, 1900.

KAUAI, 4,000 ft. Collected by Perkins on *Pelea* sp.

Plagithmysus collaris Sharp.

Sharp, Fauna Hawaiiensis, II, p. 107, Pl. VI, fig. 13, 1900.

Haleakala, MAUI. Bred by Perkins from *Pelea* sp.

Plagithmysus lamarckianus Sharp.

Sharp, Fauna Hawaiiensis, II, p. 110, 1900.

Kilauea, HAWAII. Attached to *Pipturus albidus* and *Urera sandwicensis* (Perkins); collected on *Pipturus* by Giffard; bred from *Pipturus* at Paauilo, Hawaii, by Williams; bred from *Pipturus* at Upper Hamakua Ditch trail, Kohala Mts., Hawaii, by Swezey.

Plagithmysus munroi Sharp.

Sharp, Fauna Hawaiiensis, II, p. 112, Pl. VI, fig. 19, 1900.

Waimea, 2,000 ft., KAUAI (Munro). Collected on ohia lehua by Osborn at Kokee, Kauai; Kaholuamano, Waialeale trail, Waialeale Falls (Kusche). Collected in pupal cell in *Sideroxylon sandwicense* at Kumuwela by Swezey, June, 1932.

Plagithmysus giffardi Perkins.

Perkins, Proc. Haw. Ent. Soc., I, p. 96, 1907.

Kilauea, HAWAII. Collected on *Suttonia lessertiana* by Perkins and Giffard; bred from *Smilax sandwicensis* by Swezey in 1929.

Plagithmysus fractus Perkins.

Perkins, Fauna Hawaiiensis, III, p. 646, 1910.

MOLOKAI. Fragments collected by Perkins. Host tree not known.

Plagithmysus elegans Sharp.

Sharp, Fauna Hawaiiensis, III, p. 648, 1910.

North Kona, HAWAII (Perkins). Host tree not known

Plagithmysus simplicicollis Sharp.

Sharp, Fauna Hawaiiensis, III, p. 648, 1910.

North Kona, HAWAII (Perkins). Host tree not known.

Plagithmysus kuhnsi Perkins.

Perkins, Proc. Haw. Ent. Soc., III, p. 248, 1916.

Waianae Mts., OAHU (Kuhns). Bred from *Pipturus albidus*, Haleauau Valley, Waianae Mts., Oahu by Swezey, 1927, 1928 and 1932.

Plagithmysus ignotus Perkins.

Perkins, Proc. Haw. Ent. Soc., III, p. 249, 1916.

KAUAI, 3,000 ft. (Munro). Kaholuamano, Kauai (Giffard); Waialae Falls (Kusche). Host tree not known.

Plagithmysus swezeyi Perkins.

Perkins, Proc. Haw. Ent. Soc., IV, p. 344, 1920.

Niulii, HAWAII (Swezey). Host tree not known.

Plagithmysus platydesmae Perkins.

Perkins, Proc. Haw. Ent. Soc., IV, p. 345, 1920.

Glenwood, HAWAII. Bred by Swezey from *Platydesma campanulata*.

Plagithmysus frater Perkins.

Perkins, Proc. Haw. Ent. Soc., IV, p. 500, 1921.

North Kona, HAWAII, 3,000 ft. Collected on *Pelea* sp. by Perkins.

Plagithmysus decorus Perkins.

Perkins, Proc. Haw. Ent. Soc., IV, p. 500, 1921.

Kilauea, HAWAII (Giffard). Host tree not known.

Plagithmysus nihoae Perkins.

Perkins, Tanager Expedition, No. 3, Bull. 31, B. P. Bishop Museum, p. 53, 1926.

NIHOA. Collected on Euphorbia by Bryan.

Plagithmysus forbesii Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 471, 1927.

Alakai Swamp, KAUAI (Forbes). Host tree not known.

Plagithmysus paludis Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 472, 1927.

Alakai Swamp, KAUAI (Forbes). Host tree not known.

Plagithmysus kohalae Perkins.

Perkins, Proc. Haw. Ent. Soc. VI, p. 473, 1927.

Upper Hamakua Ditch trail, Kohala Mts., HAWAII (Swezey). Host tree not known.

Plagithmysus longicollis Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 474, 1927.

Halehaku, MAUI (Bryan). Host tree not known.

Plagithmysus sharpianus Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 475, 1927.

Kumuwela, KAUAI (Swezey). Bred from *Pipturus albidus*.

Plagithmysus molokaiensis Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 475, 1927.

Kamiloloa, 3,200 ft., MOLOKAI (Swezey). Bred from *Pipturus albidus*.

Plagithmysus muiri Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 476, 1927.

Haleauau Valley, Waianae Mts., OAHU (Swezey and Williams). Bred from *Sideroxylon sandwicense*.

Plagithmysus rubi Perkins.

Perkins, Proc. Haw. Ent. Soc., VII, p. 415, 1931.

Olinda, MAUI. Bred from *Rubus hawaiiensis* by Swezey.

Plagithmysus simillimus Perkins.

Perkins, Proc. Haw. Ent. Soc., VII, p. 415, 1931.

Kula Pipe Line trail, Olinda, MAUI. Bred from *Pipturus albidus* by Swezey.

From the above, it will be seen that there are 14 species of *Plagithmysus* whose host trees have not yet been determined. Twelve of these are uniques, as follows: *newelli*, *lanaiensis*, *speculifer*, *fractus*, *elegans*, *ignotus*, *swezeyi*, *decorus*, *forbesii*, *paludis*, *kohalae* and *longicollis*; besides all of these, the host tree is unknown for *albertisi* and *simplicicollis*. All of which shows that there is yet much to learn about the *Plagithmysus* group.

***Nesithmysus bridwelli* Perkins.**

Perkins, Proc. Haw. Ent. Soc., VI, p. 343, 1920.

Mt. Kaala, 3,000 ft., OAHU (Swezey and Bridwell). The two first specimens were collected on ohia lehua and Broussaisia. Bred from *Pelea sandwicensis*, *Pelea clusiaefolia* and possibly other species of *Pelea*, on Kaala, 1930; Kahana at summit, 1931; and Waipio Ridge, 1928, by Swezey.

***Nesithmysus forbesii* Perkins.**

Perkins, Proc. Haw. Ent. Soc., IV, p. 503, 1921.

Haipuaena, 3,100 ft., MAUI. Collected on *Pelea* sp. by Forbes. Bred from *Pelea* sp. on the Kula Pipe Line trail, Olinda, Maui, by Swezey, 1927.

***Nesithmysus haasii* Perkins.**

Perkins, Proc. Haw. Ent. Soc., IV, p. 504, 1927.

Wahiawa, 2,000 ft., OAHU (Haas). Bred from *Pelea* sp. at Kahana summit by Swezey, 1931.

***Nesithmysus swezeyi* Perkins.**

Perkins, Proc. Haw. Ent. Soc., VI, p. 485, 1927.

Kula Pipe Line trail, Olinda, MAUI. Bred from *Pelea* sp. by Swezey, 1927.

All of these species of *Nesithmysus* are detrimental to their host trees. The larvae live in the living tree, either boring down the terminal twigs or branches, or else boring in the heart of living tree trunks and branches.

***Aeschrithmysus terryi* Perkins.**

Perkins, Proc. Haw. Ent. Soc., VII, p. 261, 1929.

Haleakala Crater, MAUI (Degener). Adults and larvae found in stems of silversword (*Argyroxiphium sandwicense macrocephalum*).

Aeschrithmysus swezeyi Perkins.

Perkins, Proc. Haw. Ent. Soc., VII, p. 262, 1929.

Summit of Haleakala, MAUI (Swezey and Whitten). Collected from *Raillardia ciliolata*; larvae also found boring in the stems.

Callithmysus microgaster (Sharp).

Clytarlus microgaster Sharp, Trans. Ent. Soc., London, p. 103, 1879.

Callithmysus microgaster Sharp, Fauna Hawaiiensis, II, p. 113, 1900; III, p. 649, 1910.

Mts. near Honolulu, OAHU (Blackburn); Oahu (Koebele); N. W. Koolau Range and Tantalus (Perkins); Pupukea (Swezey); Waikane (Swezey and Hadden). Collected on *Bobea elatior* and the larvae found in the same tree by Perkins; bred from *Bobea elatior* by Swezey and Hadden, 1930.

Callithmysus microgaster var. (?) *hirtipes* Sharp.

Sharp, Fauna Hawaiiensis, II, p. 113, 1900.

Kaumuahona, OAHU. Collected by Perkins on *Bobea* sp.*; bred from *Perrottetia sandwicensis* in the same locality by Swezey, 1919.

Callithmysus koebelei Perkins.

Perkins, Proc. Haw. Ent. Soc., I, p. 210, fig., 1908.

Tantalus, OAHU. Bred from *Pipturus albidus* by Koebele, Perkins, Swezey and Bridwell; bred from the same tree, Kaipapau valley by Swezey, 1928.

Neoclytarlus modestus (Sharp).

Clytarlus modestus Sharp, Trans. Ent. Soc., London, p. 104, 1879.

Clytarlus modestus Sharp, Fauna Hawaiiensis, II, p. 101, 1900.

Neoclytarlus modestus, Timberlake, Proc. Haw. Ent. Soc., V, p. 17, 1922.

Haleakala, 4,000-5,000 ft., MAUI (Blackburn, Perkins, Giffard, Fullaway, Swezey). Host tree: *Acacia koa*.

Neoclytarlus pennatus (Sharp).

Clytarlus pennatus Sharp, Trans. Ent. Soc., London, p. 532, 1881.

Clytarlus pennatus Sharp, Fauna Hawaiiensis, II, p. 102, Pl. VI, figs. 2, 3, 1900.

Neoclytarlus pennatus, Swezey, Proc. Haw. Ent. Soc., VI, p. 198, 1925.

* Later, Dr. Perkins has stated that this was not a positive identification of the tree from which a single beetle was taken. (Proc. Haw. Ent. Soc., IV, p. 502, 1921).

Haleakala, 5,000 ft., MAUI (Blackburn, Perkins, Giffard, Fullaway, Swezey). Host tree: *Acacia koa*.

Neoclytarlus fragilis (Sharp).

Clytarlus fragilis Sharp, Trans. Ent. Soc., London, p. 534, 1881.

Clytarlus fragilis Sharp, Fauna Hawaiiensis, II, p. 99, 1900.

Neoclytarlus fragilis, Bridwell, Proc. Haw. Ent. Soc., IV, p. 323, 1920.

Palolo Valley, OAHU (Blackburn, Perkins); Waianae Mts., Tantalus (Perkins); Fort Shafter Ridge (Swezey). Host tree: *Acacia koa*.

Neoclytarlus filipes (Sharp).

Clytarlus filipes Sharp, Trans. Dublin Soc., (2), III, p. 196, 1885.

Clytarlus filipes Sharp, Fauna Hawaiiensis, II, p. 99, 1900.

Neoclytarlus filipes, Perkins, Proc. Haw. Ent. Soc., VII, p. 382, 1931.

Mauna Loa, HAWAII (Blackburn); Kona, Kau, Kilauea (Perkins); Huehue (Swezey). Attached to *Sophora chrysophylla*. Reared from *Maba sandwicensis* at Puuwaawaa Ranch, Hawaii, August, 1929 (Williams).

Neoclytarlus mediocris (Sharp).

Clytarlus mediocris Sharp, Fauna Hawaiiensis, II, p. 99, Pl. VI, figs. 1, 1b, 1900.

Neoclytarlus mediocris, Perkins, Proc. Haw. Ent. Soc., VI, p. 485, 1927.

Haleakala, 3,000-5,000 ft., MAUI (Perkins). Attached to *Sophora chrysophylla*.

Neoclytarlus debilis (Sharp).

Clytarlus debilis Sharp, Fauna Hawaiiensis, II, p. 99, 1900.

Neoclytarlus debilis, Swezey, Proc. Haw. Ent. Soc., VI, p. 198, 1925.

Mauna Loa, 4,000 ft., Hualalai, 5,000 ft., HAWAII (Perkins); South Kona (Swezey). Host tree: *Acacia koa*.

Neoclytarlus obscurus (Sharp).

Clytarlus obscurus Sharp, Fauna Hawaiiensis, II, p. 100, 1900.

Neoclytarlus obscurus, Perkins, Proc. Haw. Ent. Soc., VI, p. 485, 1927.

Various localities, 3,000 ft., KAUAI (Perkins); Kaholua-mano (Kusche). Host tree: *Acacia koa*.

Neoclytarlus claviger (Sharp).

Clytarlus claviger Sharp, Fauna Hawaiiensis, II, p. 101, 1900.

Neoclytarlus claviger, Swezey, Proc. Haw. Ent. Soc., VI, p. 198, 1925.

Kilauea, HAWAII (Perkins). Host tree: *Acacia koa*.

Neoclytarlus laticollis (Sharp)

Clytarlus laticollis Sharp, Fauna Hawaiiensis, II, p. 101, 1900.

Neoclytarlus laticollis, Swezey, Proc. Haw. Ent. Soc., VI, p. 198, 1925.

Haleakala, 5,000 ft., MAUI (Perkins). Host tree: *Acacia koa*.

Neoclytarlus abnormis (Sharp).

Clytarlus abnormis Sharp, Fauna Hawaiiensis, II, p. 102, 1900.

Neoclytarlus abnormis, Perkins, Proc. Haw. Ent. Soc., VI, p. 481, 1927.

Olaa, HAWAII (Perkins). Probably attached to *Metrosideros* or *Straussia*.

Neoclytarlus nodifer (Sharp).

Clytarlus nodifer Sharp, Fauna Hawaiiensis, II, p. 102, 1900.

Neoclytarlus nodifer, Perkins, Proc. Haw. Ent. Soc., VI, p. 485, 1927.

Kona, 3,000 ft., HAWAII (Perkins); Puuwaawaa (Giffard); Humuula (Meinecke); Judd Trail, Kona (Swezey). Host tree: *Acacia koa*.

Neoclytarlus longipes (Sharp)

Clytarlus longipes Sharp, Fauna Hawaiiensis, II, p. 103, Pl. VI, fig. 4, 1900.

Neoclytarlus longipes, Swezey, Proc. Haw. Ent. Soc., VI, p. 198, 1925.

KAUAI (Perkins); Kaholuamano (Kusche). Host tree: *Acacia koa*. Bred from *Alphitonia excelsa* at Halemanu by Swezey, June, 1932.

Neoclytarlus annectens (Sharp).

Clytarlus annectens Sharp, Fauna Hawaiiensis, II, p. 104, 1900.

Neoclytarlus annectens, Swezey, Proc. Haw. Ent. Soc., VI, p. 198, 1925.

KAUAI (Perkins); 3,500-4,000 ft., Kauai (Kusche). Host tree: *Acacia koa*.

Neoclytarlus ultimus (Sharp).

Clytarlus ultimus Sharp, Fauna Hawaiiensis, III, p. 645, 1910.

Neoclytarlus ultimus, Perkins, Proc. Haw. Ent. Soc., VI, p. 485, 1927.

Tantalus, Pauoa, OAHU (Koebele, Perkins). Host tree: *Acacia koa*.

Neoclytarlus immundus (Sharp).

Plagithmysus immundus Sharp, Fauna Hawaiiensis, III, p. 646, 1910.

Neoclytarlus immundus, Perkins, (in letter, Jan. 9, 1927), Proc. Haw. Ent. Soc., VII, p. 16, 1928.

North Kona, HAWAII (Perkins, Giffard). Host tree not known.

Neoclytarlus indecens (Perkins).

Clytarlus indecens Perkins, Proc. Haw. Ent. Soc., IV, p. 346, 1920.

Neoclytarlus indecens, Bridwell, Proc. Haw. Ent. Soc., IV, p. 454, 1921.

Mt. Kaala, OAHU, September 7, 1913 (Osborn). Bred from *Smilax sandwicensis*, Mt. Kaala, July 9, 1916 (Swezey); Kaala, 1919, 1920 (Bridwell); Kahana, 1927, Waipio Ridge, 1929 (Swezey).

Neoclytarlus indecens var. **kinaluensis** Perkins.

Perkins, Proc. Haw. Ent. Soc., VII, p. 418, 1931.

Kainalu, 2,000 ft., MOLOKAI. Bred by Swezey from *Smilax sandwicensis*.

Neoclytarlus euphorbiae Bridwell.

Bridwell, Proc. Haw. Ent. Soc., IV, p. 323, 1920.

Ewa Coral Plain, OAHU (Bridwell, Swezey, Bryan). A large series bred from stems of *Euphorbia multiformis*.

Neoclytarlus pulchrior Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 482, 1927.

A single specimen known. It was found unlabelled among some miscellaneous specimens; hence, collector, locality and host plant are not known.

Neoclytarlus fugitivus Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 483, 1927.

Haleakala, 4,500 ft., MAUI. One specimen collected January 14, 1926, along the Kula Pipe Line trail by Swezey. Host plant not known.

Neoclytarlus smilacis Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 484, 1927.

Waikamoi, 4,500 ft., MAUI. Bred by Swezey from larvae in stems of *Smilax sandwicensis*, Jan., Feb., 1926.

Neoclytarlus raillardiae Perkins.

Perkins, Proc. Haw. Ent. Soc., VII, p. 416, 1931.

Summit of Haleakala, MAUI. A dozen collected by Swezey, June 17, 1927, from clumps of half-dead *Raillardia ciliolata* bushes, and larvae also found in dead stems.

Neoclytarlus geranii Perkins.

Perkins, Proc. Haw. Ent. Soc., VII, p. 417, 1931.

Haleakala, 6,000 ft., MAUI. Beetles collected by Swezey, June 15, 1927, from clumps of *Geranium trifida*, and larval burrows and exit holes found in dead stems.

Paraclytarlus timberlakei Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 480, 1927.

Mt. Olympus, OAHU. A single specimen collected on ohia lehua by Timberlake in 1916.

Paraclytarlus pipturicola Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 481, 1927.

Kailua, MAUI. A single specimen collected June 14, 1920, by Bryan on *Pipturus albidus*.

Paraclytarlus podagricus Perkins.

Perkins, Proc. Haw. Ent. Soc., VI, p. 482, 1927.

Upper Hamakua Ditch trail, Kohala Mts., HAWAII. A single specimen collected by Swezey September 2, 1919. Host tree not known.