summit sample but was absent from the *Casuarina* sample. On the other hand, *Ctenacarus araneolus* (Grandjean 1932), a species belonging to the ancestral group Palaesomata and whose distribution is confined to the Neotropical and Holarctic regions (Marshall *et al.* 1987) was reported from *Casuarina* litter. Not finding a single taxon common to both samples could be attributed to the habitat type, food source and abiotic factors such as moisture and temperature. The oribatids found at the summit were most likely associated with *Sphagnum* moss, whereas species on soil and litter probably derived their food from the habitat either as saprophages or mycophages. Comprehensive samplings of different habitats are needed to ascertain natural patterns of oribatid distribution in Mt. Kaala and other areas of the Hawaiian Islands. It is noteworthy that it took approximately 100 years after Perkins' original collections before another oribatid mite or any mite was collected from Mt. Kaala.

The incredible diversity of oribatids from a single locality and from two meager samples suggests the numerical and environmental importance of this group in the soil ecosystem that might be exploited in future reserve or park management and conservation programs as ecological indicators of soil biotopes and as indicators of effects of human and animal activities on terrestrial ecosystems.

References

Division of Forestry & Wildlife, DLNR, State of Hawaii. 1990. Mount Kaala Natural Area Reserve management plan. 35 p.

Jacot, A.P. 1934. Some Hawaiian Oribatoidea (Acarina). *Bernice P. Bishop Mus. Bull.* 121: 1–99

Marshall, V.G., R.M. Reeves & R.A. Norton. 1987. Catalogue of the Oribatida (Acari) of continental United States and Canada. *Mem. Entomol. Soc. Can.* 139, 418 p.

Nishida, G.M., ed. 1994. Hawaiian terrestrial arthropod checklist. Second edition. *Bishop Mus. Tech. Rep.* **4**, 287 p.

Norton, R.A. 1990. Acarina: Oribatida, p. 779–803. *In Dindal*, D.L., ed., *Soil biology guide*. J. Wiley & Sons, New York.

Pearce, N.D.F. 1910. Acarina. Fauna Hawaiiensis 3: 702-04.

New Records of Copepods (Copepoda) from Oahu, Hawaii

NEAL L. EVENHUIS and DAVID J. PRESTON (Department of Natural Sciences, Bishop Museum, P.O. Box 19000A, Honolulu, Hawaii 96817, USA)

Results of a terrestrial invertebrate survey pilot project along the Schofield-Waikane Trail on Oahu in 1989 resulted in the discovery of copepods collected in elevated cup traps in ohia and koa trees along the trail. Two of the 3 species, identified by J. Reid of the National Museum of Natural History, Smithsonian Institution, Washington, D.C. (NHNM), are new records to the fauna of copepods in Hawaii. Vouchers of all 3 species are in the Bishop Museum (BPBM).

Bryocyclops anninae (Menzel, 1926)

Previously reported as collected in Hawaii from a *Pandanus* leaf axil, "the Pali", Oahu (Yeatman 1984); also known from Java and Vanuatu.

Material examined. OAHU: Schofield-Waikane Trail, 2–5.x.1989, 1900 ft [580 m], leaf-litter filled cup traps on Acacia koa and Metrosideros sp. (D.J. Preston) (BPBM).

Epactophanes richardi Mrazek, 1893

New state record

This species has a cosmopolitan distribution. However, this is the first record from the Hawaiian Islands.

Material examined. OAHU: Schofield-Waikane Trail, 2–5.x.1989, 1900 ft [580 m], leaf-litter filled cup traps on Acacia koa and Metrosideros sp. (D.J. Preston) (BPBM).

Phyllognathopus viguieri (Maupas, 1892)

New state record

This species has a cosmopolitan distribution. However, this is the first record of it from the Hawaiian Islands.

Material examined. OAHU: Schofield-Waikane Trail, 2–5.x.1989, 1900 ft [580 m], leaf-litter filled cup traps on *Acacia koa* and *Metrosideros* sp. (D.J. Preston) (BPBM).

Reference

Yeatman, **H.C**. 1984. Copepods from microhabitats in Fiji, Western Samoa and Tonga. *Micronesica* **19**(1-2) [1983]: 57–90.

New Hawaiian Records for *Stephanoscyphus simplex* Kirkpatrick (Cnidaria: Scyphozoa)

B.L. Burch and T.A. Burch (Research Associates, Department of Natural Sciences, Bishop Museum, P.O. Box 19000A, Honolulu, Hawaii 96817, USA)

New records for the Hawaiian Islands are reported for *Stephanoscyphus simplex* Kirkpatrick, 1890, a sessile scyphozoan (polyp) stages of a scyphistoma medusa taken by trawl by the NOAA National Marine Fisheries Service research vessel *Townsend Cromwell* off the island of Maui and by the Burch 32-foot steel-hulled trawler *Janthina VII* from sediments 82 to 160 meters deep off Oahu.

Material examined. Cat. No. D1035, Acc. No. 1995.007, 1 specimen, BURCH-81005, 01/10/81, Mamala Bay, Oahu [021°16.4'N, 157°51.6'W], sand, Halimeda [82 m]; Cat. No. D1036,Acc. No. 1995.007, 72 specimens, BURCH-81090, 12/19/81, Mamala Bay, Oahu [021°16.1'N, 157°52.1'W], sand [293 m]; Cat. No. D1037, Acc. No. 1995.007, 2 specimens, BURCH-82004, 01/10/82, Mamala Bay, Oahu [021°16.6'N, 158°01.2'W], sand [183 m]; Cat. No. D1038, Acc. No. 1995.007, 2 specimens, BURCH-83008, 02/05/83, Mamala Bay, Oahu [021°16.4'N, 158°01.0'W], sand [256 m]; Cat. No. D1039, Acc. No. 1981.136, 2 specimens, TC-40-91, 92, 11/25/68, Kahului, Maui [021°03.5'N, 156°29.0'W], sand, mud [274 m] (all in BPBM).