Field experiments showed that the spread of a mite infestation from a given locus within a bean plot occurred in direct relation to the direction of the prevailing wind; i.e., the infestation advanced relatively fast in the direction of the wind and much more slowly against the wind, the latter being probably due to reverse gusts. Moreover, as many as 48 mites, of all stages, were trapped on individual sticky microscope slides held vertically within 3 feet and down wind of infested plants in the field.

It is suggested that experiments be done to test the possibility of tetranychid dissemination by rain splash and the dissemination of tetranychid eggs by insects.

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Checklist of the Hymenoptera of Fiji

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It is unfortunate, in the writer's opinion, that a detailed and comprehensive study of the insect fauna of the Fiji Islands, similar to the one made by Buxton and Hopkins in Samoa or that of Perkins in Hawaii, has never been made, for it is realized that our knowledge of the Fijian insects up to the present is only fragmentary. Turner, in his report on the collections sent to the British Museum by Veitch, calls attention to this need, stating: "It is important that the fauna should be studied before it becomes too much changed by the ravages of cultivation and the competition of imported forms." The report by Mann of Harvard on the collection of ants made as early as 1917 also comments on the disappearance of the indigenous fauna in most sections where the native forest has been destroyed. My interest has been aroused by obtaining for study the Hymenoptera in the collections of Noel Krauss along with those of Bryan, Zimmerman, Muir, Lever, and others (unfortunately, many of the specimens could not be determined beyond genus status), and in working over these collections for the Bishop Museum I found it desirable to compile a list of the described and recorded species. This list is presented herewith. I have been to considerable pains to make it as complete as possible but I daresay omissions will be noticed. I should be grateful to receive word of such so that the proper corrections can be made.

Braconidae

Apanteles agonoxenae Fullaway: PROC. HAW. ENT. SOC. 11:48, 1941.
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Sigalphus sp.
Sisupala splendida Nixon: TRANS. ENT. SOC. LONDON 93:422, 1943.
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Ichneumon promissorius Erickson: ARCH. NATURG. 8:256, 1841–1842.
Lissopimpla semipunctata (Kirby): TRANS. ENT. SOC. LONDON 1883, p. 202.
Lissopimpla veitchi Turner: TRANS. ENT. SOC. LONDON 1918, p. 343.
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Eulophus sp.
Eupelmus sp.
Euplectrus plathypenae Howard: BULL. U.S.D.A. BUR. ENT. (o.s.)5:26, 1885. Introduced.
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Caloteleia vitilevuensis Fullaway: PROC. HAW. ENT. SOC. 10:214, 1939.
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Epyris sp.
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Platyscelio sp.: PSYCHE 29:21, 1922 (fig.).
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Telenomus sp.

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Archaeomyrmex cacabau Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):449, 1921 (fig.).
Camponotus (*Colobopsis*) *bryani* Santschi: REV. SUISSE ZOOL. 35:72, 1928.
Camponotus (*Colobopsis*) *dentatus* Mayr: SITZ. AKAD. WISS. WIEN 53:493, 1866 (fig.).
Camponotus (*Colobopsis*) *janus* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5): 498, 1921.
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Camponotus (*Colobopsis*) *rufifrons* var. *leucopus* Emery: NOVA CALEDONIA ZOOL. 1:427, 1914.
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Camponotus (*Colobopsis*) *vitiensis* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5): 490, 1921.
Camponotus (*Myrmegonia*) *cristatus* Mayr: SITZ. AKAD. WISS. WIEN 53:489, 1866 (fig.).
Camponotus (*Myrmegonia*) *cristatus* var. *nagasu* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):482, 1921.
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Camponotus (*Myrmegonia*) *laminatus* var. *levuanus* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):479, 1921.
Camponotus (*Myrmegonia*) *maafui* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):482, 1921 (fig.).
Camponotus (*Myrmegonia*) *maudella* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):496, 1921.
Camponotus (*Myrmegonia*) *maudella* var. *seemanni* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):498, 1921.
Camponotus (*Myrmegonia*) *mayriella* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):494, 1921.

Camponotus (*Myrmegonia*) *schmeltzii* Mayr: SITZ. AKAD. WISS. WIEN 53:490, 1866 (fig.).
Camponotus (*Myrmegonia*) *schmeltzii* var. *kadi* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):485, 1921.
Camponotus (*Myrmegonia*) *schmeltzii lauensis* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):488, 1921 (fig.).
Camponotus (*Myrmegonia*) *schmeltzii* var. *loloma* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):486, 1921.
Camponotus (*Myrmegonia*) *schmeltzii trotteri* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):486, 1921 (fig.).
Camponotus (*Myrmoturba*) *irritans* var. *samoanensis* Santschi: BULL. SOC. VAUD. SCI. NAT. 52:326, 1919.
Camponotus (*Myrmoturba*) *maculatus pallidus* F. Smith var.: BULL. HARV. MUS. COMP. ZOOL. 64(5):477, 1921.
Cardiocondyla nuda Mayr: SITZ. AKAD. WISS. WIEN 53:508, 1866.
Cerapachys (*Cerapachys*) *majusculus* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):410, 1921.
Cerapachys (*Cerapachys*) *vitiensis* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):410, 1921.
Cerapachys (*Cerapachys*) *vitiensis sculpturatus* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):407, 1921.
Cerapachys (*Syscia*) *cryptus* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):410, 1921.
Cerapachys (*Syscia*) *cryptus fuscior* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):410, 1921.
Euponera (*Trachyponera*) *stigma quadridentata* (F. Smith): JOUR. PROC. LINN. SOC. ZOOL. 3:143, 1858.
Iridomyrmex anceps ignobilis Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):472, 1921.
Iridomyrmex nagasau Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):470, 1921 (fig.).
Iridomyrmex nagasau alticola Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5): 472, 1921.
Iridomyrmex nagasau ignatus Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5): 472, 1921.
Iridomyrmex sororis Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):469, 1921 (fig.).
Leptogenys (*Lobopelta*) *foveopunctata* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):421, 1921.
Leptogenys (*Lobopelta*) *fugax* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5): 422, 1921 (fig.).
Leptogenys (*Lobopelta*) *humiliata* Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):421, 1921.

Leptogenys (Lobopelta) letiliae Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5): 419, 1921 (fig.).
Leptogenys (Lobopelta) navua Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5): 423, 1921 (figs.).
Leptogenys (Lobopelta) vitiensis Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5): 423, 1921.
Monomorium (Monomorium) floricola (Jerdon): MADRAS JOUR. LITT. SCI. 17:107, 1851.
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Monomorium (Monomorium) vitiensis Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):444, 1921.
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Pheidole (Pheidole) caldwelli Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5): 434, 1921 (fig.).
Pheidole (Pheidole) knowlesi Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5): 436, 1921 (fig.).
Pheidole (Pheidole) knowlesi extensa Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):438, 1921.
Pheidole (Pheidole) onifera Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):427, 1921 (fig.).
Pheidole (Pheidole) vatu Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):431, 1921.
Pheidole (Pheidole) wilsoni Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):433, 1921.
Pheidole umbonata Mayr: SITZ. AKAD. WISS. WIEN 53:510, 1866.
Plagiolepis augusti foreli Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):473, 1921.
Poecilomyrma senirewae Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):446, 1921 (fig.).
Poecilomyrma senirewae myrmecodiae Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):448, 1921.
Ponera biroi rugosa Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):415, 1921.
Ponera colaensis Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):417, 1921.

Ponera monticola Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):418, 1921 (fig.).
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Prenolepis (Nylanderia) bourbonica var. *bengalensis* Forel: JOUR. BOMBAY NAT. HIST. SOC. 8:406–407, 1894.
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Prenolepis (Nylanderia) vitiensis Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5): 474, 1921 (fig.).
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Rogeria (Irogeria) tortuosa levifrons Mann: BULL. HARV. MUS. COMP. ZOOL. 64(5):453, 1921.
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Notes on Marine Water Striders of the Hawaiian Islands (Hemiptera: Gerridae)

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Marine water striders are the only insects that inhabit the open ocean. Much has been written about them in accounts of the early voyages of exploration, but modern knowledge is lacking because oceanographers tend to ignore insects and entomologists don't study marine faunas.

Studies by the junior author from January to July, 1955, at the Coconut Island Marine Laboratory of the University of Hawaii resulted in the following: 1) discovery that the open ocean species, *Halobates sericeus* Eschscholtz, feeds on a small anemone; 2) observing that the local Hawaiian species, *Halobates hawaiiensis* Usinger, feeds on any insects that fall into the water; 3) discovery of a remarkable new species of the genus *Hermatobates* on the lee side of the breakwater on the northwest corner of Coconut Island, Oahu, after a Kona storm.

Studies by the junior author at Berkeley and examination of *Halobates* collections from all of the large museums and marine laboratories of the world reveal a pattern of distribution that is unique. Only one nearly cosmopolitan species occurs in the Atlantic Ocean. In contrast to this, the Pacific abounds in species, with three or four species occurring in the open ocean thousands of miles from land and many local species living within the protecting reefs of particular island groups. Water temperatures and ocean currents seem to be the main determiners of the distribution of species. The Philippine-New Guinea area has the greatest number of species, and the genus appears to have arisen from a brackish water group known at present from Japan, Formosa, Korea, and east India.

Two questions were raised by the field work at Coconut Island, and these were the subject of further investigation by the senior author during the summer of 1956. First, it was found that *Halobates hawaiiensis* was limited to the Waikiki area of Oahu and that the individuals were consistently smaller than those collected by the Pacific Oceanic Fishery Investigations vessels off the Kona coast of Hawaii. Second, the new *Hermatobates* was found, but only under very unusual circumstances after a Kona storm at Coconut Island. The *Hermatobates* question, in particular, was a challenge, because this obscure group had been known only from the original collections in the Philippines