

attached by Deane, nor the specific name bestowed originally by Bailey, can stand. I hope very shortly to have the privilege of renaming it in accord with a suggestion made by Dr. Rogers.

5.—*Cleisostoma orbiculare* Rupp.—Described and figured in this Journal, April 1934.

6. *C. brevilabre* F.v.M.—General appearance of plant very similar to that of *Ornithochilus Hillii* Benth., but brighter green. Racemes produced very freely. Flowers pale creamy-green with or without brown spots, very fragrant. Labellum remarkably short with a very long basal spur. This is a very attractive little orchid, and seems more amenable to cultivation than the southern *C. tridentatum*.

7. *Cymbidium canaliculatum* R.Br. var *marginatum* Rupp, forma *purpurascens*.—In a paper read before the Linnean Society of N.S.W. in April, 1934, I have attempted to define the various forms of this "Protean" species, which is remarkable for its immense range of habitat, its adaptability to very dry and very humid conditions, and its striking variations in colour-scheme and colour. The type form has greenish flowers more or less heavily blotched with brown. The Proserpine flower is bright magenta, not blotched, but with narrow borders of pale green.

8. *Nervilia* Comm., 2 species.—Bentham and Bailey describe several Australian species of *Pogonia*, belonging to the section *Nervilia*, but this section has since been recognised as comprising a distinct genus. These orchids are terrestrial: the plant has a single reniform or orbicular veined leaf, flat on the ground, and developing at a different time from the flowering stem. Mr. Macpherson has found leaves of two obviously distinct species, and hopes to obtain flowers later on.

**Addenda and Corrigenda**

(Figures after plants indicate flowering months)

- Vol. 1
- No. 10, p. 7—Before *Flindersia* insert Family RUTACEAE, Juss. and delete before *Zieria*.
- (F.) *schottiana*. For Bunji Bunji read Cugerie. 6 to 12.
- Add loc. Atherton Plat.
- Delete (F.) *chatawaiana*.
- Before (F.) *iffalana* insert (F.) *pubescens*, F. M. Bail. 11.
- Trinity B. (Hill); Kairi (White); Rockingham B. (Dallachy); Hinchinbrook Is.
- Brayleyana, F.v.M. Maple Silkwood. 11 to 1.
- Atherton to Ravenshoe Tableland; Herberston to Cardwell (J. F. Bail.); Tully R.
- (F.) *iffalana*. For Cairns Hickory read Hickory Ash. 10 to 6.
- Add locs. Daintree R. (Swain); Mt. Molloy Dist. (Swain); Atherton Dist.
- Delete (F.) *mazlini*.
- After (F.) *pimenteliana* (F.v.M.) insert Rose Silkwood. 10 to 5.
- Add locs. L. Barrine (Kajewski); Atherton (Mocatta); Evelyn (J. F. Bail.)
- Before (F.) *bourjotiana* insert (F.) *laevicarpa*. White and Francis. Rose Ash.
- Tinaroo Range (Swain); Gadgarra (Fuller); S.E. of L. Barrine (Swain); Tarzali (Swain); Dirran (Swain).
- acuminata, White. White Silkwood. 1 to 12.
- Atherton Tablelands (Mocatta) Evelyn Tablelands (Swain); Up. Johnstone R. (White); Innisfail (Michael)
- (F.) *bourjotiana*. Add locs. Mossman R. (Tryon); Gadgarra (Kajewski); Herberston (Mocatta); Johnstone R. (Bancroft).
- Place *Zieria smithii* (Andr.) on separate line and add 7.
- Add loc. Gadgarra (Kajewski).
- After (Boronia) *artemisiaefolia* (F.v.M.) add Hoary Boronia.
- After (B.) *bowmanii* insert F.v.M.
- Before *Eriostemon* add (B.) *polygalifolia*, Sm., var. ? *pubescens*, Benth.
- Stannary Hills (Bancroft).
- Melicope fareana*. Add loc. Kairi (Bick.)

**The North Queensland Naturalist**

The Official Journal and Magazine of the North Queensland Naturalists' Club

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CAIRNS, AUGUST 1934

**Aquatic Insects in North Queensland**

By DAVID O. ATHERTON, B.Sc. Agr., Q.D. A.

(Continued from p. 17)

The commoner species are from one-half to three-quarters of an inch in length and greenish-brown in colour, usually occurring together in numbers and thus showing gregarious habits. As the common name implies, they swim rapidly and erratically about the surface, often whirling round on a circular course at a relatively tremendous speed. Although much of the time is spent on the surface they are very capable divers and frequent the bottoms of pools and streams in search of prey. Each eye is divided into an upper and a lower section, the former is above and the latter is below the surface of the water when the beetle swims on top. Two common species are *Macrogyrus australis* Brulle, about half an inch long, and *M. striolatus* Guer., about half as large again as the former. Both are dark greenish-brown in colour.

In the order Hemiptera or bugs there are also some families of generally aquatic habit and the species range in length from one-eighth of an inch to three inches. The Gerridae or water striders (often erroneously called water spiders) are very frequently encountered on ponds and sluggish streams. They are fairly stout-bodied insects with long legs and, as the name implies, progress along the surface of the water relying on its surface tension to support them. The immature stages or nymphs resemble the adults very closely in habits and appearance and neither stage is in the habit of descending below the surface. All stages feed on other insects captured on top of the water, though sometimes the food consists of insects which are already dead.

The family Belostomatidae comprises the giant water bugs and our commonest representative of this group is *Lethocerus indicus* Stal., whose dark coloured brownish-green body is upwards of three inches long and over an inch wide. The forelegs are terminated by sharp spines and by means of these the bugs are able to hold their prey.

To be continued

**Bulbophyllum Macphersonii, nomen novum, Rupp, 1934**

In the July 1934 issue of the Victorian Naturalist, the above name was given to what was listed in our last issue as *Osyricera purpurascens*, Deane. A figure of this orchid as well as the peculiar circumstances necessitating this change in name are there given in full.

**Book Review**

TERMITES AND TERMITE CONTROL. Charles A. Kofoid, Ph.D., Sc.D., Prof. of Zoology, Univ. of Calif., Editor in Chief. Price 5 dol. 768 pages and 182 figures. Published by Univ. of California Press, Berkeley, Cal.

This is the work of a special Termite Investigation Committee and represents a magnificent piece of co-operative work carried out by a large team of workers dealing mostly with North American material, and is of immense practical value not only to other workers investigating termites in other fields, but especially in a practical sense in the way of prevention and treatment of infestation. It can accordingly be recommended as a classic, not only to scientists engaging in such problems, but also to bodies having to do with timbers, such as architects, or indeed property owners of all kinds in infested districts.

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### Census of North Queensland Plants (Continued)

- Polygonum dichotomum*, Bl.
- Johnstone K. (Ladbrook); Proserpine (Michael).
- strigosum*, R.Br. Spotted Knotweed.
- Malanda (White); Rockingham B. (Dallachy).
- Rumex*, L. Dock.
- halophilus*, F.v.M.
- G. of Carpentaria (F.v.M.); Flinders R. (F.v.M)
- Muehlenbeckia*, Meissn.
- rhyticarya*, F.v.M.
- C. York (Daemel); Rockingham B. (Dallachy).
- Family **PHYTOLACCACEAE**, R.Br.
- Monococcus*, F.v.M.
- echinophorus*, F.v.M.
- Pt. Denison (Fitzalan); Edgecombe B. (Dallachy).
- Family **NYCTAGINEAE**, Juss.
- Boerhaavia*, L.
- diffusa*, L. Tah vine.
- Batavia R. (F.M.B.); Cloncurry (F.M.B); Palm Is. (Herbert).
- Pisonia*, L.
- aculeata*, L.
- C. York (Daemel); Rockingham B. (Dallachy); Edgecombe B. (Dallachy)
- Burdekin R. (Fitzalan).
- inermis*, Forst.
- Is. of G. of Carpentaria (R.Br.); Rockingham B. (Dallachy).
- P. Brunoniana*, Endl.
- Mulgrave R. (Francis); Rockingham B. (Dallachy).
- Family **THYMELAEACEAE**
- Pimelea*, B. and Sol. Rice Flower.
- cornucopiae*, Vahl.
- Badu Is. (Macgregor); C. York (Daemel); Endeavour R. (B. and Sol.)
- Rockingham B. (Thozet); Pt. Denison (Fitzalan); Burdekin R. (Bowman).
- sanguinea*, F.v.M.
- Norman R. (Gulliver); Gilbert R. (Gulliver); Cape R. (Bowman).
- collina*, R.Br. Mountain Rice-flower.
- Range between Flinders and Burdekin Rs. (Thozet)
- involutrata*, B. and Sol. Slender Rice-flower.
- Rockingham B. (Dallachy).
- haematostachya*, F.v.M.
- Rockingham B. (Dallachy); Pt. Denison (Fitzalan); Burdekin R. (F.v.M.); Edgecombe B. (Dallachy).
- latifolia*, R.Br.
- Mt. Elliott (Dallachy); Pt. Denison (Fitzalan).
- sericostachya*, F.v.M.
- Newcastle Range (Armit); Sellheim R. (Bowman).

### Addenda and Corrigenda

(Figures after plants indicate flowering months)

- Vol. 1.
- No 9, p. 5—Before
- (*Hibbertia melhanoides* add
- (*H. glaberrima*, F.v.M., Gnanndjeen, 3
- Mt. Mulligan (Flecker)
- Nymphaea lotus*, var. *australis*. For
- (Baile) read F. M. Bail.
- (*N. tetragona* Insert loc. Still shallow
- waters off Barron R
- For (*Piper banksii* (Mig.) read
- (*P. Banksii*, Mig.
- Delete *Mollinedia*, Kibara and *Wilkiea*
- and substitute *Wilkiea*, F.v.M.
- Huegeliana* (Tul.) A DC.
- Bellenden Ker Range
- angustifolia*, F. M. Bail.
- Bellenden Ker, 3,000 to 4,000ft.
- Wardelli (F.v.M.) Perk.
- Rockingham B. (Dallachy)
- macrocarpa* (F. M. Bail.) Perk. 11.
- Bellenden Ker Range to Summit of
- S. Peak; Herberton Range (Kajewski)
- macrophylla* (Benth.) A.DC.
- Endeavour R.; Gadgarra (Kajewski).
- After (*Hedycarya laxocarya* (Benth.)
- add Francis.
- After *Levieria*, add Beccari.
- (*L. acuminata* (Dallachy) Add loc.
- Rockingham B. (Dallachy).
- After *Tetrasynandra*, add Perk.
- (*T. laxiflora*. For Flowers May, read
- Wonda. 2 to 5.
- Add locs. Freshwater Cr. (Cowley);
- Tully R. (Roth.); Rockingham B.
- (Dallachy).
- (*T. pubescens*. Add loc. Rockingham
- B. (Dallachy).
- No. 10, p. 5—After (*Drosera indica*, (L.)
- Narrow-leaf Sundew, add 3.
- Add loc. Mt. Mulligan (Flecker).
- After (*Byblis liniflora* (Salisb.) add 3.
- Add loc. Mt. Mulligan (Flecker).
- P. 6—After (*Ionidium suffruticosum*
- (Gilg.) Spade-Flower, add 3.
- Add loc. Mt. Mulligan (Flecker).
- P. 7—Delete (*Melicope choorechillum*.
- Before (*M. broadbentiana* insert
- (*M. stipitata*, White and Francis.
- Glenallyn, Malanda (Hayes); Ghurka
- Pocket, Boonjie (Kajewski).
- After (*M. broadbentiana* (F.M.B.) add 5
- Add locs. Nr. Atherton (White);
- Boonjie (Kajewski).
- Before (*Evodia xanthoxyloides* insert
- (*E. micrococca*, F.v.M. 11 to 2.
- Atherton District (Swain); L. Barrine
- (Kajewski).
- (*E. honwickii*. Add loc. Gadgarra
- (Kajewski).

## The North Queensland Naturalist

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CAIRNS, SEPTEMBER 1934

### Aquatic Insects in North Queensland

By DAVID O. ATHERTON, B.Sc.Agr., Q.D.A.

(Continued from p. 21)

Small fishes and tadpoles are included in the diet of this entomological monster which is occasionally attracted to lights.

Other representatives of the order which are common in the North are the Notonectidae or back-swimmers and the Corixidae or water-boatmen. As the common name of the former group implies, they are adapted to swimming on their backs though capable of walking normally when on land. The water-boatmen are somewhat similar to the others but swim in the natural posture. At times large numbers of both groups are attracted to lights and can be seen swimming about in a basin of water which has been left under a light for a few hours in the early part of the evening.

The Perlaria or stone flies are not very common in Australia and have not been recorded from areas where there are no mountain streams. In some respects the life history of stone flies is similar to that of dragon flies which will be described in the following paragraph. The larvae are wholly aquatic whilst the adults are free-living insects with two pairs of wings. There, however, the resemblance ceases. The eggs are laid free in the water and the larvae or nymphs are usually sluggish creatures living about the rocks of rapids where they are able to feed on the particles of animal and vegetable matter borne along in the water. Before transformation occurs the nymph climbs out of the water an inch or two on some convenient rock and the adult quickly emerges. The adults are comparatively soft-bodied insects and very sluggish fliers, often resting on the foliage near the stream. They are not adapted to combat dessication and therefore seldom wander far from the water where the early part of their lives has been spent. The Australian representatives of the group are closely allied to those of New Zealand and Patagonia, and therefore constitute further evidence in support of the supposed antarctic origin of the Australian fauna. Dr. R. J. Tillyard, F.R.S., states that the fauna is essentially antarctic and that "it is rarely met with on the mainland of Australia and then only on the mountains." I have taken as many as seven species on Roberts' Plateau of the Queensland National Park, but did not expect to find stone flies in North Queensland. However, during the year 1930 I took numerous nymphal exuviae clinging to the rocks in the Mossman river gorge. These were left near the water when the adults emerged to commence their aerial existence and were in a situation not more than two hundred feet above sea level. The interest attached to this observation is obvious when one remembers the distribution usually assigned to the group in Australia. Unfortunately I was unable to obtain any of the adults as I was there at the wrong time of the year for the flight, but with the number of enthusiastic field naturalists at present interesting themselves in the fauna of the North I hope that it will not be long before adult insects are taken during the winter in some of the gorges of our local mountain torrents.

To be continued