Additions to the Wild Fauna and Flora of the Royal Botanic Gardens, Kew: XV. Coccidae

Author(s): E. Ernest Green

Source: *Bulletin of Miscellaneous Information (Royal Botanic Gardens, Kew)*, Vol. 1917, No. 2 (1917), pp. 73-76

Published by: Springer on behalf of Royal Botanic Gardens, Kew

Stable URL: <http://www.jstor.org/stable/4113397>

Accessed: 27-06-2016 07:15 UTC

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://about.jstor.org/terms>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Royal Botanic Gardens, Kew, Springer are collaborating with JSTOR to digitize, preserve and extend access to *Bulletin of Miscellaneous Information (Royal Botanic Gardens, Kew)*

Fig.

10. *P. cinerascens*.
11. *P. Corni*.
12. *P. Dipsaci*.
13. *P. glandicola*.
14. *P. Herminierae*; a, A-spores; b, B-spores.
15. *P. Landeghemiae*.
16. *P. Lonicerae*; a, A-spores; b, B-spores.
17. *P. Menispermi*.
18. *P. moricola*.
19. *P. petiolorum*.
20. *P. Phaseoli*.
21. *P. piceata*; a, spores; b, spores of *C. concava*.
22. *P. Podophylli*.
23. *P. pterophila*.
24. *P. quercella*.
25. *P. Radula*.
26. *P. sambucina*.
27. *P. scobina*.
28. *P. Sorbariae*; a, A-spores; b, B-spores; c, the two, side by side.
29. *P. striaeformis*.
30. *P. velata*; a, B-spores; b, A-spores and c, elongated sporophores of *P. communis*.
31. *P. aucubicola*; a, B-spores; b, A-spores; c, an elongated sporophore.
32. *P. Coronillae*; a, A-spores; b, B-spores.

All the figures are magnified 1000 times.

VII.—ADDITIONS TO THE WILD FAUNA AND FLORA OF THE ROYAL BOTANIC GARDENS, KEW: XV.

Coccidae.

E. ERNEST GREEN.

By the courtesy of the authorities I was permitted to search the plant houses in the Royal Botanic Gardens at Kew, for *Coccidae*, on the 7th of December last. It may be interesting to compare the result of my search with the previous occasion—twenty years ago (in May, 1896)—when I visited the Gardens with a similar object. On that occasion I listed sixteen distinct species, and Prof. Newstead, as the result of a visit in the same year, added six others, making twenty-two species in all. On the present occasion I again found sixteen species (mentioned below); but, of these, three had not previously been recorded from the Gardens (or, indeed, from the British Isles), one of the three being new to science.

On going through these splendid houses, containing countless plants from every part of the world, I had a selfish feeling of disappointment that, owing to the evident care with which the

plants had been tended and doctored, comparatively so few insects were to be found. With the exception of three or four common greenhouse pests, which it is practically impossible to eradicate from any conservatory, the species observed were the result of very diligent search, and were represented by few individuals only.

I append a list of the species taken on this occasion.

1. ***Lecanium tessellatum*, Sign.**

Commonly on various palms. Also on *Tabernaemontana* sp., *Ardisia humilis* and *Ochna pumila*.

2. ***Lecanium hemisphaericum*, Targ.**

On *Carissa* sp. and *Rheedia*.

3. ***Lecanium longulum*, Dougl.**

On *Monodora*, sp., *Treculia*, *Carissa*, and *Excoecaria discolor*.

4. ***Lecanium oleae*, Bern.**

On *Erythrina* sp.

5. ***Lecanium nigrum*, (?) var. *depressum*, Targ.**

Abundantly on *Musa*. More rarely on *Chrysophyllum*, *Mala-cantha*, and *Ficus* spp.

These examples have all the microscopical characters of typical *nigrum*, but have a different external fascies, being of a dull brown colour and less strongly convex than the type.

6. ***Lecanium signiferum*, Green.**

On *Polypodium aureum*.

This insect has hitherto been recorded from Ceylon and India only. It is possible that it may be—as suggested by Sanders—a varietal form of *L. hesperidum*; but, if so, its very characteristic colour pattern (green or olivaceous, with strongly-marked purplish or blackish longitudinal stripe and double transverse bands) make it deserving of a distinct name.

7. ***Pulvinaria floccifera*, Westw.**

On *Cordia* sp.

A common hot-house pest, affecting more particularly orchids of many kinds.

8. ***Pseudococcus longispinus*, Targ.**

This appears to be the most widely distributed Coccid in the Kew houses. Amongst numerous other plants I noted its occurrence on *Musa*, *Cycas*, *Euphorbia*, and *Cotyledon pringlei*.

9. ***Pseudococcus citri*, Risso.**

This usually common greenhouse pest was noticed only on *Solandra* and a species of *Euphorbia*.

10. ***Pseudococcus nipae*, Mask.**

Rather commonly on various palms; more particularly on *Cocos*, *Kentiopsis*, and *Sabal*.

This interesting species has not previously been recorded from the British Isles. Mr. Fryer sent me examples, a few months

ago, taken on an imported palm in a London sale-room, but the insect must have been established at Kew for some considerable time, though unnoticed hitherto. It may be readily recognised by its distinct buff colour and by the compact conical waxy processes on the dorsum.

11. *Diaspis echinocacti*, *Bouche*.

On *Cereus* sp.

12. *Hemichionaspis aspidistrae*, *Sign*.

On *Polypodium aureum*.

13. *Aspidiotus ficus*, *Ashm*.

On *Pandanus*.

14. *Aspidiotus hederæ*, *Vallot*.

On *Euphorbia*, sp. and *Asparagus falcatus*.

15. *Ischnaspis filiformis*, *Dougl*.

Abundant on various palms.

16. *Lepidosaphes* sp. nov. (to be described elsewhere).

On *Nephrodium* sp.

Other records of Coccidae collected at Kew are to be found in Newstead's "Monograph of British Coccidae" and, at rare intervals, in the pages of the "Entomologist's Monthly Magazine." It may be useful to bring together all these records (42 in all, exclusive of indigenous open-air species) in the following list of species that are known to have occurred in the plant houses of the Royal Botanic Gardens.

Icerya aegyptiaca.

Orthezia insignis.

Asterolecanium bambusae.

Coccus tomentosus.

Gymnococcus agavium.

Ripersia filicicola.

Pseudococcus citri, *longispinus*, *nipae*.

Vinsonia stellifera.

Pulvinaria floccifera.

Lecanium hemisphaericum, *nigrum*, *nigrum-depressum*,* *oleae*, *hesperidum*, *signiferum*,* *longulum*, *tessellatum* (= *perforatum*).

Pinnaspis buxi (= *pandani*).

Hemichionaspis aspidistrae.

Diaspis boisduvallii, *echinocacti* (= *calyptroides*), *carueli*, *pentagona*, *persimilis*.*

Howardia biclavata.

Aspidiotus ficus, *hederæ*, *personatus*, *spinatus*, *dictyospermi*, *cyanophylli*, *perseae*, *aloes* (probably wrongly determined).

Gymnaspis aechmeae.

Parlatoria pergandei-crotonis.

Fiorinia kewensis.

* (Additions to the list published in the "Wild Fauna and Flora of the R.B.G., Kew") of the Royal Botanic Gardens, Kew, *Kew Bull. Add. Series V.*, 1906, and Additions thereto in *K.B.*, 1907, p. 97, and *K.B.*, 1908, p. 124.

Poliaspis cycadis.

Lepidosaphes pinnaeformis, and *sp. nov.*

Ischnaspis filiformis.

VIII.—TREE LABELS AT KEW.

A very noticeable tendency in horticulture previous to the outbreak of war was the growing interest that was being taken in hardy trees. This was evident not only amongst landed proprietors and owners of gardens generally, but equally so in regard to the general public. The ordinary system of labelling the trees at Kew has been to give the botanical name, the popular or English name (if such existed), and the country of which the tree was a native. For those who had access to text-books, this information provided the key to any further knowledge they might desire to obtain about any particular tree or trees. But by far the greater proportion of visitors to Kew do not possess books on trees, and, in view of the growing popular interest in the subject, it seemed desirable to provide a label which, attached to the tree itself, would give a brief and untechnical account of its origin, its history, its economic qualities, and so on.

About eight years ago a commencement was made by printing on cards, 6 in. by 4 in., an account, running to about one hundred words, of the commoner trees. The cards were of green Willesden paper, thin, very hard, and resistant but not impervious to moisture. They were fitted in tin frames painted black with a sheet of glass in front, and the whole nailed to the tree trunks. These card labels thus protected proved to be very satisfactory, and have been much appreciated by the public. In recent years, however, it has been found difficult to keep them in order, on account of the wanton smashing of the glass fronts by mischievous visitors. In number such visitors certainly are very few, and probably young and irresponsible, but unfortunately it is easy for a single person so disposed to break a large number of these glasses. For this reason an unbreakable waterproof covering for the labels was suggested, and a method of treating them was found which has proved satisfactory and is now being generally used.

As these descriptive card-labels have been copied in other public gardens, it has been thought desirable that the following account of their treatment should be published:—

CARD-LABELS AND CELLULOID-VARNISH.

The use of celluloid-varnish as a protective covering on printed card-labels was recommended by Professor C. V. Boys, F.R.S., the object in view being to make the labels resistant to damp, and therefore capable of being exposed to the weather without the protection of a facing of glass.

As an experiment, a considerable number of labels coated with celluloid-varnish have been put into use during the past twelve months, the labels being placed in the same frame-like metal holders as before, but without glass. The outcome of the experiment shows that satisfactory results can be obtained by the use of celluloid varnish made and applied as follows:—