John O. Westwood's Cabinet of Oriental Entomology (1848)

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Abstract: The present article reminds us a mid-19th century volume written on Indian insects — the Cabinet of Oriental Entomology — by John Obadiah Westwood, a University of Oxford academic, in 1848. This less-than 100-page volume is more of an illustrative catalogue of different insects Westwood had received for examination and description from several of his friends residing in India and nearby islands, such as Ceylon (Sri Lanka) and those of Indonesia. This 88-page book includes 42 pages of superb hand-colour illustrations of insects and the plants they are associated with, most from the Indian subcontinent and a few from Indonesia and Ceylon (broadly East Indies), in addition to scientific descriptions of them. This work was one among the many steps on which later Indian entomological science trekked and flourished. The names of many insects referred in this book have been changed over time for specific reasons. Although the names of some of the insects and associated plants have been wrongly spelt, the *Cabinet of Oriental Entomology* includes valuable remarks on the biogeography and affinities of the referred insects, and also to what we refer today as 'biological diversity'.

Key words: Colour illustrations, 19th century, East Indies

ohann Gerhard König [JGK] (1728-1785) trained as a surgeon and disciple of Carl Linnaeus at the University of Uppsala (Sweden). JGK while serving with the Danish Mission at Farangampãdi (11°1'N, 79°51'E) published the 'first' entomological scientific paper in India entitled the Naturgeschichte der sogenannten weißen Ameise (The natural history of the socalled white ants) in the natural-science journal Beschäftigungen der Berlinischen Gesellschaft Naturforschender Freunde, Berlin, in 1779. Dru Drury, a British merchant, an insect enthusiast, and a friend of the Danish entomologist Johann Christian Fabricius, published a 3-volume book in 1773, in which he refers to insects collected in Bengal and Madras regions of India (Drury, 1773). The Drury volumes include

delightful illustrations, but the text used in it follows an obscure description style, based on dimensions. Six decades later, John Obadiah Westwood (JOW), entomologist and palaeographer attached to the University of Oxford, edited and republished the Drury volumes by revising notations and including valid binomials, in 1837.

From the second half of the 19th century, the biology of the Indian subcontinent attracted many European amateur and professional natural historians. Notable among them was Joseph Dalton Hooker — better remembered as a botanist - who came to India and trekked the Himalaya accompanied by a large troupe of assistants, documented the botany, zoology including entomology, geology, and

anthropology of sections of the Himalaya (Hooker, 1854).

Many European natural historians never travelled to India but received specimens and illustrated them with notes. Edward Donovan and Dru Drury would be good examples, who documented and made illustrations of insects of the Indian subcontinent by obtaining specimens from European museums and Europeans residing in India. Charles Kerremans, a Belgian, published a work on the Buprestidae of India in the later decades of the 19th century (Kerremans, 1892). In my previous article (Raman 2016), I have listed several such European amateur professional and entomologists, who studied Indian insects in the 19th and early decades of the 20th centuries.

In the present article, I will talk about a mid-19th century volume on Indian insects, the Cabinet of Oriental Entomology (Figure 1) by JOW and published by William Smith, London, in 1848. This 88-page volume is an illustrative catalogue of different insects for JOW received examination and description from India and nearby islands, broadly referred then as the East Indies. Before we go into the details of this slim book, a short biography of JOW would be in order.

John O. Westwood

JOW (22 December 1805-2 January 1893) further to being an expert entomologist and a palaeographer, professed extraordinary artistic talents. He added to entomological knowledge by providing enchanting illustrations of insects. He was a professor at the University of Oxford (Figures 2, 3). He strongly supported the Creation theory. He supported William Macleay's quinarian perspective of animal and insect evolution (Westwood, 1839–1840). Although JOW had never travelled extensively, insect specimens - especially the larger, curious, and colourful species - came to him in London, sent by travelling European naturalists and collectors from all over the world. For an extensive note on JOW's life, please read a note on JOW by Bernhard Wandolleck (1864–1930) in 1893, a dipterist attached to the Royal Museum of Zoology, Anthropology, and Ethnography, Dresden (today, Museum für Völkerkunde Dresden).

JOW worked mostly on the taxonomy of the Hymenoptera yet maintaining an general entomology. interest in The following list of his books indicates his passion in general Entomology: The Entomologist's *Textbook* (1838),An Introduction to the Modern Classification of (1839 - 1840),Insects and Arcana Entomologica (1845). He was a work associate and a close friend of Frederick William Hope (1797-1862), and in that context of professional camaraderie, JOW published the Thesaurus Entomologicus Oxoniensis (1874).

The Cabinet of Oriental Entomology

In the preface (p. 1–2), dated 1 January 1847, JOW indicates:

"The object of the Work now offered to the notice of the Entomologist and lover of Nature in general is to present a Series of Figures of some of the rarer and more splendid species of Insects which have within these few last years been forwarded to England, from the various districts of India and adjacent islands. ... The present work, however, is proposed to be rather a pictorial

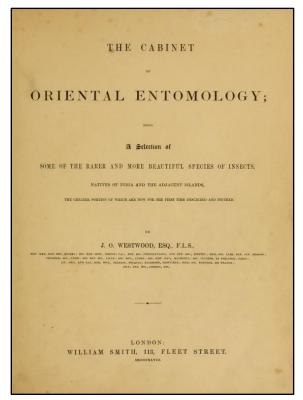


Fig. 1. Cover page of the Cabinet of Oriental Entomology by John Westwood (1848).

illustration of the larger and more splendid species; and, as such, it is hoped, that, by finding its way to the table of an Indian drawing-room, it may gain more converts to the study of a science full of curiosity, and awaken an interest in the objects of pursuit, thus supplying an engaging occupation to our Indian friends."



Fig. 2. JOW in his 40s (Source: http://www.stsepulchres.org.uk/burials/westwood_ john.html. Fig. 3. JOW in later years (Source: https://artuk.org/discover/artworks/ professor- john-obadiah-westwood-142122/search/keyword:westwood).

He acknowledges the support he got from a few of the British residents in India, who supplied him specimens of insects from India. Colonel John Bennett Hearsey (1793-1865) and Major Robert Jenkins (1828-1857) of the Bengal Army, John Forbes Royle (1798-1858), Superintendent of the Saharanpur Botanical Garden, and William Henry Benson, a Bengal Presidency civil servant, Calcutta, who was also an amateur

Table 1. Numbers of species described and illustrated

Coleoptera	 72
Orthoptera	 25
Neuroptera	 10
Lepidoptera	 58
Homoptera	 10
Diptera	 5

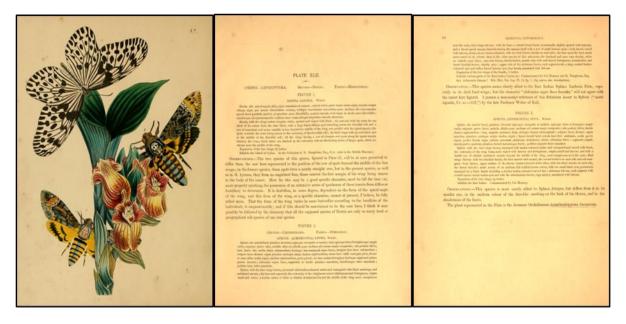


Fig. 4. Illustration (and notes), Plate II. *Papilio icarius* (Lepiodptera: Lycaenidae) on *Dendrobium moniliforme* (Orchidaceae).

Malacologist are the names that could be identified. He thanks Captains Boys, Hutton, and Robinson, possibly of the Bengal Army, and two more, Templeton and Downes, who could not be determined as to their affiliations.

This book includes 42 pages of colour illustrations of 180 species of insects, obtained mostly from the Indian subcontinent and a few from Indonesia and Ceylon supplemented by short descriptions (Table 1). The section 'Description' also includes 'Observations', a highly useful section referring to the biogeography of that particular species and relationships with allied insects and groups. The illustrations, made by JOW are precise and brilliantly hand-coloured, worthy of being collectors' items. Without re-describing the details supplied by JOW, in this article, I have included two sets of pages of illustrations and descriptions of Plates II and LXII, thus leaving the reader to infer the quality of supplied information. The

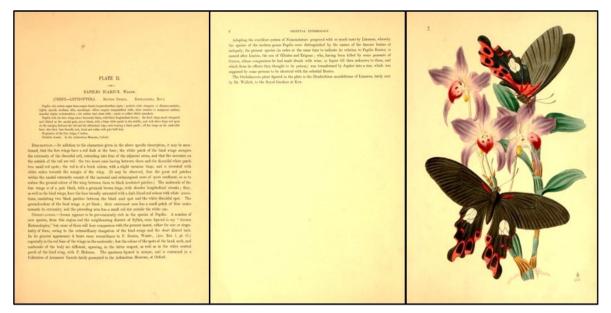


Fig. 5. Illustration (and notes), Plate LXII. *Idea iasonia, Euchromia lethe*, and *Acherontia styx* associated with *Acanthephippium javanicum* (Orchidaceae).

Plate II (Figure 4) refers to Papilio icarius (presently Р. (Lepidoptera: *icarus*) Lycaenidae) shown hovering on an Dendrobium impressively sketched moniliforme (Orchidaceae). The Plate LXII (Fig. 5), on the contrary, refers to three Lepidoptera, Hestia iasonia (presently Idea iasonia) (Nymphalidae), Sphinx (Acherontia) lethe (presently Euchromia *lethe*) (Erebidae), and *Sphinx* stvx (presently Acherontia styx) (Sphingidae) shown associated with Acanthophippium *javanicum* (=*Acanthephippium javanicum*) (Orchidaceae). The Plate LXII (Fig. 5) refers to the species JOW got from Indonesia and Ceylon (Sri Lanka).

Conclusion

The present article is a pointer to infer Indian entomology in the 19th century. Done by a British entomologist, this work, further to similar others made by foreign entomologists and natural historians, indeed paved the way for Indian entomological science to prosper. Of course, names of many insects have changed over time for obvious reasons. Names of some of insects and associated plants have been wrongly spelt in JOW's *Cabinet of Oriental Entomology*. Notwithstanding such omissions and errors, this book notably sheds light on the biogeography and affinities, further to and importantly to what we refer today as 'biological diversity'.

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