

The Family de Alwis Seneviratne of Sri Lanka: pioneers in biological illustration

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Abstract

Harmanis de Alwis (1792–10.6.1894) of Kalutara, Sri Lanka, was employed as a botanical artist at the Botanic Gardens, Kalutara (1818–22) and Peradeniya (1822–61), during which time he delineated more than 2,000 Sri Lankan plants. He was created a Muhandiram in 1831 and a Mudliyar in 1854, following which he took on the additional name of Seneviratne.

Two of de Alwis's sons, William (1842–1916) and George (dates unknown), were also to make significant contributions to botanical and zoological illustration. Members of at least two further generations of the family were to serve as illustrators at the Botanic Gardens in Peradeniya and Singapore. Collections of the family's works (and contemporary copies) are deposited in the National Herbarium, Peradeniya; the National Museum of Sri Lanka, Colombo; the Department of Agriculture, Gannoruwa; Queen's Cottage (presidential retreat), Nuwara Eliya; the Natural History Museum, London; Royal Botanic Gardens, Kew; the Singapore Botanic Garden; and the Calcutta Botanic Garden.

Abbreviations

PDN, National Herbarium, Peradeniya; NMSL, the National Museum of Sri Lanka, Colombo; DASL, the Department of Agriculture, Gannoruwa; QC, Queen's Cottage (presidential retreat), Nuwara Eliya; BMNH, the Natural History Museum, London; RBGK, Royal Botanic Gardens, Kew; SBG, the Singapore Botanic Garden; CBG, the Calcutta Botanic Garden.

Historical account

Alongside the consolidation of Dutch colonial rule in Sri Lanka (then Ceylon) in the 17th and 18th centuries, botanical exploration too, was to continue apace. Early work in the island by Grimm (1679)¹, Hermann (1717)², and Burman (1737)³, set the stage for Linnaeus's *Flora Zeylanica* (1747)⁴, a synthesis of all that was then known of Sri Lanka's botanical wealth. With the ceding of the island to Great Britain at the turn of the 19th century, the British colonial administration was no less enthusiastic in investigating Sri Lanka's potential for the cultivation

of plants of economic importance, and also further exploring the botanical wealth it contained.

The first botanic garden to be established under British colonial rule in Sri Lanka, aptly named Kew Gardens after the already-famous RBGK, was at Slave Island, Colombo⁵. The first superintendent of the gardens, William Kerr (?–1814), soon wished for a more extensive area however, and the gardens were in 1814 relocated to Kalutara, some 40 km south of Colombo. Later the same year, Kerr died. His replacement, Alexander Moon (?–1825), arrived in Sri Lanka in 1817, and was anxious to get started on a systematic exploration of the island's flora, a task until then not envisioned.

In 1818, a 26-year old Sinhalese man from Kalutara, Harmanis de Alwis, was interviewed by Moon and given an appointment as 'native writer' (the appellation then in use for a native clerk) in the Gardens' office. Nothing is known of Harmanis's background, except that in order to gain employment

he must have been fluent in English; he was probably a Christian of the Anglican denomination (he certainly was at the time of his death).

Moon soon discovered that his new clerk had remarkable talent as an artist. He paid for lessons in art for the young man⁶ and encouraged him to engage in the scientific depiction of plants. Soon, Harmanis was making forays into the countryside, returning not just with drawings made from life, but also the specimens depicted. Harmanis's expenses were met personally by Moon, who reposed great confidence in his protégé.

By 1821 however, Moon was convinced that the gardens at Kalutara would never flourish. The waterfront land was waterlogged, and trees were almost impossible to grow. Besides, pressure was growing for large-scale clearing of the island's pristine rain forests for the cultivation of crops of economic importance to the colonial power: 'Lieut. Governor Sir Edward Barnes... [may also] have been persuaded to this opinion by his desire to see the cultivation of coffee spread in the colony.'⁷

In 1822 Moon finally relocated the gardens—and Harmanis—to the site of the 'late Kandyan kings' garden at Peradeniya'.⁸ From the cooler climate of this sub-montane station (altitude ca. 500 m above sea level), he would provision the governor with European vegetables, and provide nurseries for the ever increasing numbers of exotic plants being experimentally cultivated in the island.

Moon also found time to botanize. He made extensive forays into the jungles around Kandy and returned with cart-loads of specimens, each of which would be carefully pressed, dried and preserved for posterity. Identification was not always easy, for a reference library was lacking. Yet, by 1824, Moon was able to put together a checklist of the plants then known to him from Sri Lanka⁸, including those in the Gardens and the new herbarium, 1,127 species altogether. The work was produced bilingually in a single edition, and was one of the first books to be printed in Sinhala. Harmanis had assisted Moon throughout the preparation of the book, and was responsible for the Sinhala text. In 1825, tragically, Harmanis's mentor died.

Fortunately, in 1823, Moon had secured for Harmanis a permanent appointment as draftsman to the Gardens. He was to hold this post for 38 years, retiring only in 1861, aged 70. After Moon's death, Harmanis kept himself occupied by systematically drawing the increasing number of plants that came to his attention. Much of his drawing was done in the field, exploring the then barely-accessible rain forests of Sri Lanka. In the course of his career, Harmanis was to depict in colour more than two

thousand plants, many species more than once. Most drawings included details of flowers and flower parts; almost all of them were coloured. This collection was preserved at PDN until 1998, when it was transferred to NMSL.

In 1831, in recognition of his exceptional work, Governor Edward Barnes conferred on Harmanis the title of Muhandiram. As was customary when the title of Muhandiram or Mudliyar was conferred, Harmanis took on an additional name, in his case Seneviratne, an appellation his descendants still use today: de Alwis Seneviratne.

In the mean time, in 1836 Robert Wight (1796–1872), superintendent of the botanic gardens at Madras (now Chennai), India, visited Peradeniya and saw Harmanis's productions. So impressed was Wight that in 1839 he arranged for Harmanis to travel to Madras for instruction in botanical dissection and making drawings with the aid of a microscope. During his three-month sojourn in Madras, Harmanis was not only to master these specialities, but actually make several drawings for Wight's forthcoming *Icones*.⁹

Following Moon's death, standards at the botanic garden deteriorated steadily. Soon it was no more than a farm for growing garden vegetables for the *Raj* in Colombo. The Gardens continued to languish until in 1844, George Gardner (1812–49) was appointed Superintendent. Gardner was keen to publish a work similar to Wight's *Icones* for Sri Lanka, and soon Harmanis was given the task of drawing the plates: 'Many new coloured drawings of Ceylon plants have been made by the draughtsman, for the general work I am now preparing on the botany of the island', Gardner wrote in 1847.

Showing Prince Waldemar of Prussia around the Gardens in 1844, Harmanis had impressed the prince's physician, the botanist Werner Hoffmeister: 'We found [Harmanis] well qualified to act as a most efficient cicerone, and even acquainted with the botanical names of the plants and their classification,' he recalled¹⁰. Well pleased with Harmanis's work, in 1844 Gardner petitioned¹¹ for an increase in Harmanis's salary (then just £3 per month). But in 1849, aged just 37, Gardner died 'of apoplexy'¹² while on a visit to Nuwara Eliya and his ambitious project to publish illustrations of the entire Sri Lankan flora was forever abandoned.

The vacuum Gardner left was filled the same year by George Henry Kendrick Thwaites (1812–82), who was one year Gardner's senior. Thwaites was an indefatigable worker and produced a prolific array of botanical papers, but did not have the patience to work on an illustrated book on the Sri Lankan flora. Between 1858 and 1864 he produced his *Enumeratio*¹³,

in which the plants then known from Sri Lanka were all listed and briefly described. The book won Thwaites not only a coveted fellowship of the Royal Society but also a PhD¹⁴. In the preface he was to acknowledge Harmanis—

I would wish to associate with this little book the names of Harmanis de Alwis Modliar, and of Don Seman De Silva Aratchy, native officers, employed during many years in this establishment, the former as draftsman, the latter as principal plant collector, to whose intelligent and hearty co-operation is due much of my success in procuring new and rare species of plants from the jungles.

For his part in the project, in 1854 Harmanis had been honoured with the title of Mudliyar by Governor G. W. Anderson. Harmanis retired from the Gardens in 1861. He lived a healthy life in full control of his faculties (except, towards the end, his failing eyesight would annoy him), until his death on 10 June 1894, aged 101 (Thwaites himself had died in Kandy on 11 September 1882).

On 1 November 1865 Harmanis's son William was appointed draughtsman and formally succeeded his father. He was eventually to retire (also having been created a Muhandiram in 1896 and Mudliyar in 1901) on 28 February 1902, to be succeeded in turn by his son (i.e. Harmanis's grandson) Alfred¹⁵.

Thwaites was not just a botanist, but had an abiding love for natural history. He collected specimens of all groups of animals, from insects to mammals, preserved them carefully and sent them on to the BMNH where zoologists such as Albert Günther were to describe and name them. Such was Thwaites's enthusiasm that in 1874, he persuaded the governor, William Gregory, to finance a special project for William de Alwis from his (Gregory's) personal funds. William was commissioned simply to 'paint the butterflies of Ceylon.'

This inconceivable task William completed in 1878, providing Thwaites with detailed water-coloured drawings of no less than 350 species of Sri Lankan butterflies and moths, 250 of them complete with larva, chrysalis and food plant in addition to the imago in both sexes, together with preserved specimens. The accomplishment of such an undertaking in just four years defies belief. William's work stands out as the greatest single contribution to knowledge on any group of animals in Sri Lanka.

So exceptional were the drawings of Lepidoptera that Thwaites was loathe to consign them to London by sea. By way of insurance Gregory commissioned another of Harmanis's sons, George, to make a complete and accurate set of copies. These were then sent to London, to Frederic Moore, the English entomologist, and were to become the foundation

for Moore's three-volume *Lepidoptera of Ceylon*¹⁶. As luck would have it, William's priceless originals remained in Sri Lanka and were lost.

George's set of duplicates survives in the Entomology Library of the BMNH. William's services as a technical artist continued to be widely sought. He worked for Henry Trimen (1843–96) (who succeeded Thwaites as Director of the botanic gardens), on his five-volume *Flora* (1893–1900)⁶ which is accompanied by a volume of plates, most of which are the work of William, but some of which are George's, or joint works by Harmanis and one or the other of his sons. William also made drawings for the Swiss brothers Karl Friedrich Sarasin (1859–1942) and Paul Benedikt Sarasin (1856–1929) in the course of their zoological and anthropological researches in Sri Lanka between 1884 and 1886, culminating in the publication of their classic, *Forschungen auf Ceylon* (1887–1908)¹⁷.

Under Thwaites's supervision, William also went on to make more than 1,000 detailed illustrations of Sri Lankan fungi, including mushrooms, from which (and the specimens relating to which) M.J. Berkeley (1803–89) and C.E. Broome (1812–86) described more than 300 species as new to science. Copies of all these drawings, made by Berkeley's daughter Cecilia, are preserved at RGBK; the originals were returned to Sri Lanka and are now with the DASL.

William and George too, were to travel to India and work with Wight's principal artist, Govindo. Together they illustrated several Indian botanical works, including *Icones plantarum Indiae orientalis* (1869–74) and *Flora sylvatica for southern India* (1869–74) by R.H. Beddome (1830–1911) and also Sir George King's (1840–1909) monographs of the Indian Myristicaceae (1890) and Annonaceae (1893). At least three of Harmanis's grandsons too, were associated with the Gardens and continued the tradition of botanical illustration until after World War I. Little is known of them: William's son, A.G. de Alwis, was confirmed as photographer and draughtsman at the Department of Agriculture on 1 May 1915¹⁸. A.H.G. Alston, Systematic Botanist of the Department of Agriculture, Peradeniya in his *Kandy Flora* (1938) refers to '...original drawings made by Messrs A. [Alfred, William's son] and A.G. Alwis [sic] under the supervision of the author.' S.D.J.E. Senaratna, in his *The grasses of Ceylon* (1956) writes, 'Most of the drawings are by A.G. Alwis, the remainder copied from the Peradeniya Herbarium collection by A.de Alwis, formerly draughtsman...'

Harmanis's sons and grandsons also find mention elsewhere, for example, in *A manual of the weeds of the major crops of Ceylon* (1951): '...with reproduction of designs from the Peradeniya Herbarium collection

by A. Geo[rge] Alwis, draughtsman...'. George de Alwis is also mentioned in *Tropical Agriculturist*, vol. 107(1), p. 29 (1951), in which journal drawings by members of the family appeared regularly, e.g. of the plant *Grewia asiatica* in vol. 100(2), p. 108 (1944). In the centenary publication of the Peradeniya Gardens⁷ the following are listed as serving in the staff: E[dwin] de Alwis (Laboratory Assistant, Entomology); Edmund de Alwis (Museum Assistant); Alfred de Alwis (Draughtsman); and A.G. de Alwis (Draughtsman): all four were probably sons of William. Little is known of George and his progeny: he appears not to have been interred in the family graveyard at St. John's Church, Gatambe, Kandy, and may have died in India.

In 1890, H.N. Ridley (1855–1956), Director of the SBG, embarked on a *Flora* for the illustration of which he commissioned D.N. Choudhuri, an artist from the CBG. In 1900 however, Choudhuri was 'attacked by a brain disease and became insane', for which reason he was confined to an asylum and eventually repatriated to India. Ridley then turned to the Peradeniya Gardens for help, and was loaned the Sri Lankan brothers Charles and James de Alwis, who were to delineate a large number of Singaporean and Malaysian plants now in the collection of the SBG: their relationship to Harmanis is not clear. Their drawings were 'of an extremely high standard, especially those of Charles. For accuracy and artistic beauty, it would be difficult to find work comparable to that of Charles de Alwis.'¹⁹ Several dozen drawings of plants and fungi executed by the brothers were also sent—together with specimens—to RBGK²⁰. James quit the service of the SBG in 1903, though Charles, who was in fact a photographer transferred from the Public Works Department, went on to serve the Gardens until his resignation in 1908.

The *Reports on the Royal Botanic Garden, Peradeniya* during the period of Gardner, Thwaites and Trimen include several references to on-going work by the de Alwises for the publication of a series of plates of Sri Lankan plants, which, however, never came to be realised—

The artist is going on steadily with the delineation of native plants of the island... The draughtsman is paid only £3 a month. His equal as a native botanical artist, I am certain does not exist in India... He has served upwards of 20 years.—
GARDNER, 1845.

Many new coloured drawings of Ceylon plants have been made by the draftsman for the general work I am now preparing on the botany of the island.—
GARDNER, 1847.

I trust that means may subsequently be found, without additional expenditure being incurred by

the establishment, of publishing, in the style of Dr. Wight's *Icones plantarum Indiae orientalis*, the numerous drawings in the library, which are daily being added to by the excellent draughtsman now employed, and which in the course of a few years will form a series of great value. By permission of His Excellency, and at my suggestion, a considerable number of the coloured drawings, which were made many years ago, without that attention to correctness of detail necessary to give them any real scientific value, have been disposed of by public auction²¹, and they realised quite as much as I expected.—
THWAITES, 1853.

A great many valuable drawings of indigenous plants have been added to the library during the year, and I am able to report very favourably as to the improvement shown in their execution by the native assistant draughtsman [presumably William] whose services deserve better remuneration than they receive at present.—
THWAITES, 1858.

The draughtsman added 22 finished drawings to the fine series of coloured illustrations of plants of Ceylon. The drawings are the work of one family (father and two sons), fully coloured, probably unparalleled in the East for accuracy of botanical detail and beauty of delineation... 35 years ago Dr. Gardner suggested publishing them... Such a selection could still be made.—
TRIMEN, 1880.

Although the Alwises were honoured by the British, they have received scant recognition from their own countrymen. Harmanis' had named after him by John Lindley a species of leafless orchid, *Taeniophyllum alwisii*, endemic to Sri Lanka. In honour of his work on fungi, William had named after him a genus of slime mould, *Alwisia*.

Harmanis and William are buried in the same grave at the de Alwis Seneviratne family graveyard at St. John's Church, Gatambe, Kandy²².

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manuscript, making several useful suggestions and drawing my attention to additional material.

Notes

- 1 Grimm, Nicholas. 1679. *Insulae Zeyloniae Thesaurus Medicus vel Laboratorium Zeylonicum*. Amsterdami. 167 pp.
- 2 Hermann, Paul. 1717. *Musaeum Zeylanicum, sive Catalogus Plantarum, in Zeylana sponte nascentium observatarum et descriptarum*. Lugduni Batavorum. ii+71 pp.
- 3 Burman, Johannes. 1737. *Thesaurus Zeylanicus; exhibens Plantas in insula Zeylana nascentes...* Amsterdami. vi+235+34pp., 110 pls.
- 4 Linnaeus, Carolus. 1747. *Flora Zeylanica, sistens Plantas Indicas Zeylonae Insulae, quae olim 1670–77 lectae fuere a P. Hermann...* Holmiae. xxviii+240+14+1pp., 4 pls.
- 5 This was in fact a continuation of the botanic gardens established at Peliyagoda 13 years previously by the Eudelin de Jonville, a Frenchman who was 'Clerk for Natural History' to the first British governor of Ceylon, Frederick North. 'Kew Gardens' continued to exist as such until 1822, when they were sold off by the government.
- 6 Boulger, G.S. 1900. 'History of Ceylon botany', pp. 367–381 in, Trimen, H., *A handbook to the flora of Ceylon containing descriptions of all the species of flowering plants indigenous to the island and notes on their history, distribution and uses, with an atlas of plates illustrating some of the more interesting species*, vol. 5 [J.D. Hooker et al., eds.]. Dalau & Co., London. 477 pp.
- 7 Stockdale, P.A., Petch, T. and H.F. Macmillan, 1922. *The Royal Botanic Gardens, Peradeniya, Ceylon, 1822–1922*. H.W. Cave & Co., Colombo.
- 8 Moon, Alexander. 1824. *A catalogue of the indigenous and exotic plants growing in Ceylon, distinguishing the several esculent vegetables, fruits, roots and grains, together with a sketch of the divisions of genera and species in use among the Singhalese*. Wesleyan Mission Press, Colombo. 168 pp.
- 9 Wight, Robert. 1840–53. *Icones Plantarum Indiae Orientalis, or Figures of Indian Plants*. 6 vols. Madras.
- 10 Hoffmeister, W., 1848. *Travels in Ceylon and continental India... translated from the German*. Edinburgh. xii+527 PP.
- 11 *Report on the Royal Botanic Garden, Peradeniya, August, 1844*.
- 12 Desmond, R. 1992. *The European discovery of the Indian Flora*. Royal Botanic Gardens / Oxford University Press. 355 pp.
- 13 Thwaites, G.H.K. 1864. *Enumeratio Plantarum Zeylaniae: an enumeration of Ceylon plants, with descriptions of the new and little-known genera and species, observations on their habitats, uses, native names, etc.* Dalau & Co., London. viii+483 pp.
- 14 Desmond, R. 1994. *Dictionary of British and Irish botanists and horticulturists*. The Natural History Museum, London. 825 pp.
- 15 *Annals of the Royal Botanic Gardens, Peradeniya*, 1: 266 (1901–02).
- 16 Moore, Frederic. 1880–87. *The Lepidoptera of Ceylon*. 3 vols. London.
- 17 Sarasin, Paul Benedikt & Karl Friedrich Sarasin. 1887–1908. *Ergebnisse naturwissenschaftlicher Forschungen auf Ceylon...1884–86*. 4 vols. & Atlas, 84 pls. Wiesbaden.
- 18 *Tropical Agriculturist*, July 1916, p. 62.
- 19 Tinsley, Bonnie. 1989. *Visions of delight: the Singapore Botanic Gardens through the ages*. Singapore.
- 20 Anon. 1908. *Annual report on the Botanic Gardens, Singapore for the year 1907*. Straits Settlements.
- 21 The fate of the auctioned drawings is unknown: the de Alwis drawings displayed at the governor's (now the president's) official retreat at Nuwara Eliya, Queen's Cottage, are possibly part of this set.
- 22 The inscription on the tombstone reads 'In loving memory of our beloved ones—Mudaliyar H. De Alwis Seneviratne, b. 1792, d. 10.6.1894; Walter De Alwis Seneviratne, b. 1880, d. 1892; Mudaliyar W. De Alwis Seneviratne, b. 1842, d. 30.1.1916; Kate Maria Perera Samarasinghe, b. 1888, d. 29.12.1936; Wilfred De Alwis Seneviratne, b. 1882, d. 9.1. 1940; Edmund De Alwis Seneviratne, b. 1885, d. 18.3.1950. *They Rest from their Labours and their Works do follow them*. QEV 14 13' and 'In loving memory of Edith Maude, Born 21.7.1887 Died 3.8.1924, beloved wife of Muhandiram E. de Alwis Seneviratne. *Blessed are they that believe in the Lord.*'



Plate 1. Harmanis de Alwis Seneviratne, probably at the time of the assumption of the title of Muhandiram; artist

unknown: portrait in the Lindley Library, London (by courtesy of the Royal Horticultural Society).



Plate 2. Harmanis de Alwis Seneviratne in the costume of a Mudliyar, bearing his ceremonial sword (by courtesy of Shelton H.P. Samarasinghe).



Plate 3. *Stemonoporus wightii* (Dipterocarpaceae), a tree endemic to Sri Lanka's south-western wet zone, by

Harmanis de Alwis Seneviratne (Collection of the National Herbarium, Peradeniya).



Agaricus endoxanthus (Alwis)

Agaricus endoxanthus (Alwis) Seneviratne



Plate 4. *Agaricus endoxanthus*, a mushroom recorded only from Peradeniya and Hantana, by William de Alwis

Seneviratne, copied by Cecilia Berkeley (by courtesy of Royal Botanical Gardens, Kew).

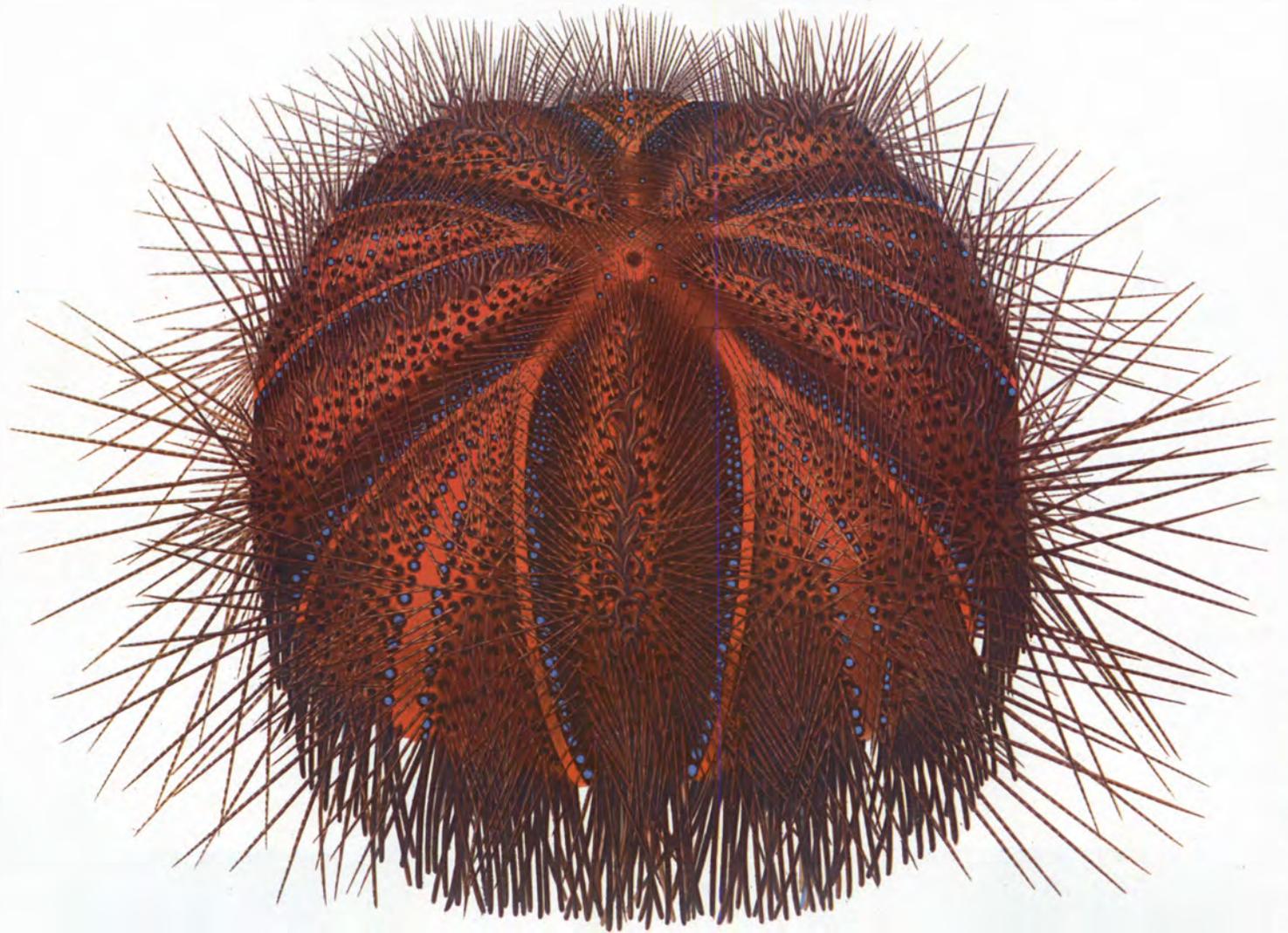


Plate 5. *Astropyga freudenbergi*: drawing by George de Alwis, published in vol. 1, part 1 of Sarasin & Sarasin (1887)¹⁷.



Plate 6. The endemic birdwing butterfly of Sri Lanka, *Troides darsius*, showing both sexes of the imago also the larva, chrysalis and food plant, by William de Alwis

Seneviratne, from a duplicate made by his brother, George (by courtesy of the Entomology Library, The Natural History Museum, London).