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COL. R. H. BEDDOME'S CONTRIBUTION TO THE FLORA OF PENINSULAR INDIA

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Richard Henry Beddome (1830—1911) reached Jabalpore in 1848 and joined the Indian Army. In 1856 he was attached to the Madras Infantry. As a young officer he showed a strong taste and profound interest in natural history pursuits, devoting himself both to Zoological and Botanical studies. His aptitude for botanical studies was acknowledged in 1857 when Beddome was selected to act as Cleghorn's Senior Assistant in the newly organised forest department with Dr. Cleghorn as Conservator. Later, when Cleghorn became the Inspector General of Forests under the Government of India, Beddome succeeded him as Conservator in Madras and held that position till his retirement in 1882. He immortalized himself in botany particularly by his sixty years' study on South Indian Ferns.

When Beddome became the conservator, he had ample opportunities to visit most of the areas in South India (Table 1) and to make intensive and extensive collections. He visited each place several times probably to study the seasonal aspect of vegetation. Particular mention may be made of Anamalays which he visited seven times between 1855 and 1873. He could collect about 6000 very valuable specimens from the till then unexplored forest area. These specimens were given to the Madras Museum in consideration of a sum of Rs. 1500/-. This acquisition was considered to be very valuable, as these included 1,897 species which were not represented in the Madras Museum Herbarium at that time.

Beddome's contribution to the Madras Herbarium is unparalleled and unique. Out of 1,526 type materials representing 625 taxa available in MH, about 200 comprising of 120 taxa are his collections (Table No. II). Some of these are extremely rare and are known only from his type collections. There is every chance that a few of them have already become extinct.

The result of his studies were embodied in 20 publications. He had an inherent love for Nature. He was attracted by the beautiful but ephemeral balsams of Anamalays. He published his first paper "The genus *Impatiens* and the description of a new species from the Anamalay mountains" in 1858. By virtue of his connection with the forest department he had given much attention to the study of forest trees and other plants of forestry importance. "The Trees of the Madras Presidency" was published in 1863. This was followed by his "Flora Sylvatica for South India" a work in two volumes with 359 plates issued between 1869 and 1874. Subsequently, he published another commendable work—"Icones Plantarum Indiae Orientalis" with 300 quarto plates and descriptions of interesting species from Southern India and Ceylon.

His fame as a Pteridologist is unique. "The Ferns of Southern India" his first work in this line containing 271 plates and descriptions of plants met with in Madras Presidency and Ceylon appeared in 1864. This was followed by "Ferns of British India" containing 345 plates and brief descriptions. This paved the way for the preparation of a concise "Handbook to the Ferns of British India, Ceylon and Malay Peninsula" (1883), after his retirement. The Handbook was again augmented by a supplementary volume published in 1892. He has also published a few other short notes on ferns.

Apart from the above publications, he has published thirteen small papers (Beddome 1858a, 1858b, 1861-62, 1865a, 1865b, 1876, 1877a, 1877b, 1880, 1888, 1907, 1908a, 1908b) on different aspects of plant life.

After his retirement, he went to England and was for many years, a frequent visitor to the Herbarium and Gardens at Kew. He discussed on Indian ferns with two other highly reputed experts on Indian ferns,—Lieut. Col. F. Handerson and Mr. H. C. Levinge. In the year 1898, he presented his very valuable collections of Indian mosses to the Kew Herbarium, which are now incorporated in the general collections. He was always ready to help other workers in taxonomy. His last work was the naming of the ferns collected by A. Meebold and H. N. Ridley from India and Malaya, respectively.

J. D. Hooker (1862) and Dixon (1922) erected two new generic names—*Beddomea* and *Beddomiella* in his honour. Several species are also named after him.

Beddome was also, an ardent gardner. He devoted much attention and took keen interest in the cultivation of various groups of plants, which experience broadened his ability to correlate information on plants in the herbarium and in the field or garden.

From his 18th year, he spent his life-time in collecting and studying on Indian plants. He died at his residence "Sispara" West Hill, Putney England on 23rd February, 1911.

Table No. I : Areas visited by Beddome in Peninsular India

*Alwaye, Anamalays (1855, 1864, 1866, 1870, 1871. 1873); *Baleppally, Bangalore (1873), *Bellary, Bolavampatty hills (1869), Carcorghat (1870), Coimbatore (1873), *Colatorpally (Kulathupuzha), *Devala, Godavari (1857), Hyderabad (1855), *Kalbatty, *Kodaikanal, *Kollimalai, Krishna forest (1880), *Kundha, Madras (1890), Madurai (1877, 1880). *Mahendragiri Hills, Malabar (1865, 1873), *Mysore, *Naduvattam, *Nallamalai, Nilambur (1871, 1873), Nilgiri (1852, 1855, 1856, 1860, 1864, 1871, 1872, 1873, 1886), *North Arcot, *North Canara, Ooty (1856, 1873, 1883), Palghat Hills (1865, 1871), Palkonda Hills (1873), *Papanasam Hills, Peermade (1873), Pudukkotta (1871, 1873), Pulneys (1870, 1899), Quilon (1864), *Ramandurg, *Salem, *Segur ghat, Shivagiri Hills (1868), *Simhachalam, *Sispara, South Canara (1865, 1866, 1870, 1873, 1876, 1880), South Canara Plains (1869), South Concan (1873), Tinnevelly Hills (1864, 1868, 1879, 1880, 1881), Travancore (1867, 1873), Travancore Hills (1860, 1876), Trivandrum (1871), Vellar Hills (1871), *Visakhapatnam, *Walghat, Wallarae (1857), *Waltair, *Wynaad.

Table No. II : Type Specimens of Taxa Based on Beddome's Collections in Madras Herbarium

Name of Species	*MH Nos.*
ANNONACEAE	
Goniothalamus rhynchantherus Dunn	597, 598, 599, 602.

*Year of collection not available in MH records.

Name of Species	*MH Nos.*
G. wynaadensis Bedd.	609, 612, 613.
†*Miliusa nilgirica* Bedd.	734.
Mitrephora grandiflora Bedd.	620, 621.
Orophea erythrocarpa Bedd.	796, 797, 798, 799.
O. thomsoni Bedd.	800, 801, 802, 803.
†*Phaeanthus malabaricus* Bedd.	560, 561.
†*Popowia beddomeana* Hook. f. & Thoms.	559.
Unona ramarowii Dunn	413, 414, 415.
U. viridiflora Bedd.	417, 418.
Uvaria eucincta Bedd. ex Dunn	279, 280, 281, 282, 283, 284, 285.
GUTTIFERAE	
Calophyllum elatum Bedd.	3080.
DIPTEROCARPACEAE	
Balanocarpus erosa Bedd.	3459.
Hopea parviflora Bedd.	3349, 3358, 3359.
H. racophloea Dyer	3371, 3373, 3376.
H. utilis (Bedd.) Bole	3470.
MALVACEAE	
† *Hibiscus setinervis* Dunn	4203, 4205.
Sida beddomei K. C. Jacob	93175.
STERCULIACEAE	
† *Heritiera papilio* Bedd.	4687.
OCHNACEAE	
Ochna beddomei Gamble	8705, 8706.
BURSERACEAE	
† *Boswellia ovalifoliolata* Bal. & Henr.	8776.
MELIACEAE	
† *Agalaia barberi* Gamble	9095.
† *A. bourdillonii* Gamble	9099.
† *A. canarensis* Gamble	9098.
† *A. roxburghiana* Hieron var. *courtallensis* Gamble	9058
Lansium anamalayanum Bedd.	9194
OPILIACEAE	
Miquelia dentata Bedd.	9714.
CELASTRACEAE	
Euonymus serratifolius Bedd.	9899.
Gymnopetalum grandiflorum Bedd.	9911, 9912.

Name of Species	*MH Nos.*
HIPPOCRATEACEAE	
Salacia malabarica Gamble	10297.
S. beddomei Gamble	10302.
RHAMNACEAE	
† *Colubrina travancorica* Bedd.	10734.
Ventilago lanceolata Gamble	10392, 10393.
SAPINDACEAE	
Otonephelium stipulaceum (Bedd.) Radlk.	11783, 11784, 11786, 11787.
ANACARDIACEAE	
Gluta travancorica Bedd.	12307.
Holigarna beddomei Hook. f.	12303, 12310.
Nothopegia aureo-fulva Bedd.	12212.
N. beddomei Gamble	12194, 12195.
LEGUMINOSAE	
Crotalaria bidiei Gamble	12505.
C. clarkei Gamble	12995, 12997, 12998.
C. shevaroyensis Gamble	12112, 13116.
†*Dalbergia travancorica* Thoth.	17025.
Humboltia unijuga Bedd.	18465, 18467, 18468.
Indigofera barberi Gamble	13684.
Inga cynometroides (Bedd.) Baker	19320, 19321.
Ormosia travancorica Bedd.	17463.
Tephrosia calophylla Bedd.	14107.
ROSACEAE	
Parenari indicum (Bedd.) Bedd.	19328, 19330.
MYRTACEAE	
†*Eugenia calacadensis* Bedd.	20816.
†*Syzygium malabaricum* (Bedd.) Gamble	20726.
MELASTOMATACEAE	
†*Medinella malabarica* Bedd.	21367, 21368.
Memecylon gracile Bedd.	21613.
M. terminale Dalz.	21638.
Osbeckia reticulata Bedd.	21141.
Sonerila brunonis Wight & Arn.	21386.
S. travancorica Bedd.	21396.
SAMYDACEAE	
Casearia wynaadensis Bedd.	22298.

Name of Species	*MH Nos.*
RUBIACEAE	
Acranthera anamallica Bedd.	25064.
A. grandiflora Bedd.	25047, 25048.
Hedyotis albo-nervia Bedd.	24384, 24388.
H. *anamalayana* (Gamble) Rolla Rao et Hemadri	24375.
H. beddomei Hook. f.	24330, 24331
H. buxifolia Bedd.	24329.
H. eualata (Gamble) Henry & Subr.	24365, 24366
H. hirsutissima Bedd.	24377, 24380.
H. purpurascens Hook. f.	24259, 24261, 24263.
H. travancorica Bedd.	24405, 24406.
H. viscida Bedd.	24415.
H. wynaadensis (Gamble) Rolla Rao et Hemadri	24383.
Ixora leucantha Heyne var. *malabarica* Gamble	25783.
Lasianthus oblongifolius Bedd.	26385.
L. truncatus Bedd.	26395.
Psychotria anamalayana Bedd.	26283, 26285, 26286.
Saprosma corymbosum (Bedd) Bedd.	26476, 26478.
VALERIANACEAE	
Valeriana beddomei C. B. Cl.	26828.
COMPOSITAE	
†*Emilea ramulosa* Gamble	28488.
Helichrysum perlanigerum Gamble	27949, 27952.
Microglossa zeylanica Benth. var. *beddomei* Gamble	27395, 27396, 27397, 27398, 27399.
Vernonia anamallica Bedd. ex Gamble	27092.
† *V. beddomei* Hook. f.	27058.
V. heynii Bedd. ex Gamble	27015.
V. travancorica Hook. f.	26965.
MYRSINACEAE	
Ardisia amplexicaulis Bedd.	29532.
EBENACEAE	
Diospyros assimilis Bedd.	30171, 30172, 30175.
D. microphylla Bedd.	30367, 30368, 30369, 30370, 30371.
D. nilagirica Bedd.	30192.

Name of Species	*MH Nos.*
SYMPLOCACEAE	
Symplocos acuminata Bedd.	30543, 30545, 30547.
S. anamallayana Bedd.	30604, 30605.
S. barberi Gamble	30573.
S. oligandra Bedd.	30459, 30460.
APOCYNACEAE	
Chilocarpus malabaricus Bedd.	31360, 31363, 31364.
Toxocarpus beddomei Gamble	32234.
T. palghatensis Gamble	32232.
† *Utleria salicifolia* Bedd.	32192.
ASCLEPIADACEAE	
Ceropegia ensifolia Bedd.	32841.
C. fimbriifera Bedd.	32706.
LOGANIACEAE	
Strychnos cinnamomifolia Thw. var. *wightii* A. W. Hill	33120.
GENTIANACEAE	
Exacum anamalayanum Bedd.	33226.
E. atropurpureum Bedd. var. *palghatense* Gamble	33225.
E. courtallense Arn. var. *laxiflorum* Gamble	33198, 33199.
ACANTHACEAE	
Andrographis lawsonii Gamble	38093.
Barleria beddomei T. And. ex Bedd.	38509.
Diotacanthus grandis (Bedd.) Benth. ex C. B. Cl.	38259, 38260, 38264.
Rungia apiculata Bedd.	38896.
Strobilanthes canaricus Bedd.	37674.
S. gracilis Bedd.	37910.
S. newii Bedd.	37889, 37890.
S. urceolaris Gamble	37734.
S. violaceus Bedd.	37917.
LABIATAE	
Pogostemon travancoricus Bedd.	41055, 41056.
LAURACEAE	
Actinodaphne bourdillonii Gamble	44618.
A. campanulata Hook. f.	44602.

Name of Species	*MH Nos.*
EUPHORBIACEAE	
Coelodepas calycinum Bedd.	48084.
Cyclostemon malabaricus Bedd.	47335.
Helicia travancorica Bedd. ex Hook. f.	45028.
Micrococca beddomei Prain	48135, 48138, 48139.
M. wightii Prain var. *hirsutum* Prain	48141.
Reidia stipulacea Gamble	46974.
ERIOCAULACEAE	
†*Eriocaulon dianae* Fyson var. *parviflora* Fyson	73364.
GRAMINEAE	
Isachne angladei C. E. C. Fischer	88586.
I. kunthiana Wight & Arn. var. *latifolia* Hook. f.	88579.
Ochlandra travancorica (Bedd.) Benth. ex Gamble	83514, 81814, 97275.

†Presumed to be Beddome's collection; needs confirmation.

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