

# On the preliminary check-list of phanerogamic climbers of the India Botanic Garden, Calcutta

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Indian Botanic Garden, Calcutta

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## INTRODUCTION

The Indian Botanic Garden, Calcutta, with its 273 acres of land abounds with 15,000 plants distributed in 2500 species. Systematic accounts of nonherbaceous phanerogams of the Indian Botanic Garden, Calcutta, were carried out by ANDERSON (1865), GAGE (1912), and recently by SEN and NASKAR (1965). Very recently, MITRA and GHOSH (1971) have published an account of semi-aquatic and aquatic vegetation of the said garden. No systematic investigation has yet been made about the flowering climbers of the garden.

The purpose of this study by the authors is to make an inventory of the phanerogamic climbers growing in the garden which will help as an aid to gardeners, botanists, plant breeders, agronomists and technical persons with interest in Botany and Horticulture to know the occurrence of varied types of climbers both exotic and indigenous growing in the arboretum of the Indian Botanic Garden.

In the following check-list the arrangement of families of plants follows BENTHAM and HOOKER (1862-1883). Nomenclature is essentially that of RAIZADA (1958, 1966, 1968) and SANTAPAU and WAGH (1963). Genera and species are presented alphabetically within families. Abbreviations C = cultivated and W = wild, have been used against each species.

RANUNCULACEAE		CELASTRACEAE	
<i>Clematis gouriana</i> Roxb.	C	<i>Celastrus paniculata</i> Willd.	C
<i>C. integrifolia</i> Linn.	C	<i>Salacia prinoides</i> DC.	C
		<i>S. roxburghii</i> Wall.	C
DILLENIACEAE		RHAMNACEAE	
<i>Delima sarmentosa</i> Linn.	C	<i>Ventilago calyculata</i> Tul.	C
		<i>V. denticulata</i> Willd.	C
ANONACEAE		VITACEAE	
<i>Artabotrys hexapetalus</i> (L.f.) Bhandari	C	<i>Ampelocissus latifolia</i> (Roxb.) Planch.	C/W
<i>Unona discolor</i> Vahl.	C	<i>Cayratia carnosa</i> (Lamk.) Gagnep	W
<i>Uvaria hamiltoni</i> Hook f. & Thoms.	C	<i>Cissus discolor</i> Bl.	C
<i>U. macrophylla</i> Roxb.	C	<i>C. quadrangularis</i> Linn.	W/C
		<i>C. repanda</i> Wt. & Arn.	W/C
		<i>Vitis vinifera</i> Linn.	C
MENISPERMACEAE		SAPINDACEAE	
<i>Antitaxis calocarpa</i> Kurz	C	<i>Allophyllus serratus</i> Radlk	W
<i>Cocculus hirsutus</i> (Linn.) Diels	W	<i>Cardiospermum helicacabum</i> Linn.	W
<i>Stephania japonica</i> (Thunb.) Miers	W	<i>Serjania albopunctata</i> Wright & Griseb.	C
<i>Tiliacora racemosa</i> Colebr.	W	<i>S. cuspidata</i> Cambess	C
<i>Tinospora cordifolia</i> Miers	C	<i>S. meridionalis</i> Cambess	C
CAPPARIDACEAE		CONNARACEAE	
<i>Capparis zeylanica</i> Linn.	W	<i>Rourea commutata</i> Planch.	C
<i>Merua arenaria</i> Hook. f. & Thoms.	C		
STERCULIACEAE		PAPILIONACEAE	
<i>Buettneria pilosa</i> Roxb.	C	<i>Abrus precatorius</i> Linn.	C/W
		<i>Butea superba</i> Roxb.	C
		<i>Camoensia maxima</i> Welw. ex Benth.	C
		<i>Clitoria ternetea</i> Linn.	W/C
		<i>Crotalaria seriaca</i> Retz.	C
		<i>Derris elliptica</i> Benth.	C
		<i>D. scandens</i> Benth.	C
		<i>Millettia auriculata</i> Baker ex Brandis	C
MALPIGHIACEAE		CAESALPINIACEAE	
<i>Banisteria argentea</i> Spreng. ex A. Juss.	C	<i>Bauhinia auguina</i> Roxb.	C
<i>B. Laurifolia</i> Linn.	C	<i>B. diphylla</i> Buch.-Ham.	C
<i>Hiptage benghalensis</i> (Linn.) Kurz	C		
<i>H. obtusifolia</i> DC.	C		
OLACACEAE			
<i>Olax scandens</i> Roxb.	C		

<i>B. corymbosa</i> Roxb.	C		
<i>B. semibifida</i> Roxb.	C		
<i>B. vahlii</i> Wt. & Arn.	C		
<i>B. saigonensis</i> Pierre ex Gagnep.	C		
<i>Caesalpinia digyna</i> Rottl.	C		
<i>C. tortuosa</i> Roxb.	C		
MIMOSACEAE			
<i>Acacia pennata</i> (Linn.) Willd.	C		
COMBRETACEAE			
<i>Combretum acuminatum</i> Roxb.	C		
<i>C. coccineum</i> Lamk.	C		
<i>C. comosum</i> G. Don.	C		
<i>C. latifolium</i> Bl.	C		
<i>C. ovalifolium</i> Roxb.	C		
<i>C. pilosum</i> Roxb.	C		
<i>C. roxburghii</i> Spreng.	C		
<i>Quisqualis indica</i> Linn.	C		
PASSIFLORACEAE			
<i>Passiflora foetida</i> Linn.	C/W		
<i>P. mexicana</i> A. Juss.	C		
<i>P. suberosa</i> Linn.	C/W		
CUCURBITACEAE			
<i>Cephalandra indica</i> Naud.	W		
<i>Luffa acutangula</i> (Linn.) Roxb.	W/C		
<i>L. cylindrica</i> (Linn.) M. J. Roem.	W/C		
<i>Trichosanthes bracteata</i> (Lamk.) Voigt	W		
<i>Zehneria umbellata</i> Thw.	W		
RUBIACEAE			
<i>Paederia foetida</i> Linn.	W		
COMPOSITAE			
<i>Mikania cordata</i> (Burm. f.) Bl.	W		
<i>Vernonia elaeagnifolia</i> DC.	C/W		
OLEACEAE			
<i>Jasminum auriculatum</i> Vahl.	C		
<i>J. multiflorum</i> (Burm. f.) Andr.	C		
		APOCYNACEAE	
		<i>Aganosma caryophyllata</i> (Roxb. ex Sims.) G. Don.	C
		<i>Allamanda cathartica</i> Linn.	C
		<i>Beaumontia grandiflora</i> (Roxb.) Wall.	C
		<i>Carissa arduina</i> Lamk.	C
		<i>Chonemorpha fragrans</i> (Moon) Alston.	C
		<i>Ichnocarpus frutescens</i> R. Br.	C
		<i>Landolphia florida</i> Benth.	C
		<i>L. madagascariensis</i> Benth. & Hook. f.	C
		<i>Melodinus monogynus</i> Roxb.	C
		<i>Rhynchodia verrucosa</i> (Bl.) Woodson	C
		<i>Roupellia grata</i> Wall. & Hook.	C
		<i>Strophanthus caudatus</i> Kurz	C
		<i>S. dichotomus</i> DC.	C
		<i>S. divaricatus</i> Wall.	C
		<i>S. hispidus</i> DC.	C
		<i>S. wallichii</i> A. DC.	C
		<i>Vallaris solanacea</i> (Roth) O. Ktz.	C
		ASCLEPIADACEAE	
		<i>Cryptolepis buchmanii</i> R. & S.	C
		<i>Cryptostegia grandiflora</i> R. Br.	C
		<i>Dragea volubilis</i> (Linn. f.) Benth. ex Hook. f.	W
		<i>Hemidesmus indicus</i> R. Br.	W/C
		<i>Hoya angustifolia</i> Trail.	C
		<i>H. carnosia</i> R. Br.	C
		<i>H. gonoloboides</i> Regel	C
		<i>H. motoskei</i> Teijsm. & Binn.	C
		<i>H. parasitica</i> Wall.	C/W
		<i>H. purpurea - fusea</i> Hook	C
		<i>Marsdenia tenacissima</i> W. & A.	C
		<i>Pergularia daemia</i> (Forsk.) Choiv.	W
		<i>Telosma pallida</i> (Roxb.) Craib.	W
		<i>Tylophora indica</i> (Burm. f.) Merr.	W
		CONVOLVULACEAE	
		<i>Argyreia capitata</i> (Vahl.) Choisy	C
		<i>A. cuneata</i> Ker-Gawl.	C
		<i>A. nervosa</i> (Burm.f.) Boj	C
		<i>Cuscuta reflexa</i> Roxb.	W
		<i>Ipomoea cairica</i> (Linn.) Sweet.	W
		<i>I. quamoclit</i> Linn.	W

<i>Jacquemontia pentantha</i> (Jacq.) G. Don.	C		
<i>Porana paniculata</i> Roxb.	C		
<i>P. volubilis</i> Burm. f.	C		
		ARISTOLOCHIACEAE	
		<i>Aristolochia indica</i> Linn.	C
		PIPERACEAE	
		<i>Piper betle</i> Linn.	C/W
		EUPHORBIACEAE	
		<i>Mallotus repandus</i> Muell. Arg.	C
		MORACEAE	
		<i>Ficus pumila</i> Linn.	C
		<i>Plecosperrum andamanicum</i> King	C
		ACANTHACEAE	
		MONOCOTYLEDONS	
		ORCHIDACEAE	
		<i>Vanilla planifolia</i> Andr.	C
		DIOSCOREACEAE	
		<i>Dioscorea bulbifera</i> Linn.	C
		<i>D. deltoidea</i> Wall.	C
		<i>D. hispida</i> Dinnst.	C
		LILIACEAE	
		<i>Asparagus plumosus</i> Baker	C
		<i>Gloriosa superba</i> Linn.	C
		<i>G. rothschildiana</i> O'Brien	C
		<i>Smilax zeylanica</i> Linn.	W/C
		PHYTOLACACEAE	
		ARACEAE	
		<i>Monostera deliciosa</i> Liebm.	W/C
		<i>Pothos scandens</i> Linn.	C
		<i>Rhaphidophora decursiva</i> Schott.	W/C
		<i>Scindapsus officinalis</i> Schott.	W/C
		<i>Syngonium podophyllum</i> Schott.	C
		BIGNONIACEAE	
<i>Bignonia chamberlaynii</i> Sims	C		
<i>B. magnifica</i> Bull.	C		
<i>B. unguis-cati</i> Linn.	C/W		
<i>Campsis radicans</i> (Linn.) Seem.	C		
<i>C. grandiflora</i> (Thunb.) K. Schum.	C		
<i>Pyrostegia venusta</i> (Ker-Gawl.) Miers	C		
<i>Tecomaria capensis</i> (Thunb.) Spach.	C		
<i>Tenaecium jaroba</i> Swartz.	C		
		ACANTHACEAE	
<i>Thumbergia alata</i> Boj	C		
<i>T. erecta</i> (Benth.) T. And.	C		
<i>T. grandiflora</i> Roxb.	C		
		VERBENACEAE	
<i>Congea tomentosa</i> Roxb.	C		
<i>Clerodendron splendens</i> G. Don	C		
<i>Petrea volubilis</i> Linn.	C		
		NYCTAGINACEAE	
<i>Bougainvillea glabra</i> Choisy	C		
<i>B. spectabilis</i> Willd.	C		
		POLYGONACEAE	
<i>Antigonon leptopus</i> Endl.	C/W		

## DISCUSSION

In the above inventory of the flowering climbers of the garden, the authors have only taken into account the climbing plants which grow on support and are subscandent types and lianes, but not the creeping plants growing on soil. The authors have recorded 102 genera of the flowering climbers spread over 151 species. Out of 151 recorded species, 76.1 % are exclusively cultivated taxa, 11.9 % taxa grow in wild state and 12.5 % taxa are both cultivated and wild. It is very interesting to note that in the garden only 13 species of monocyledonous climbers are grown of which only one is an orchidaceous climber, known as *Vanilla planifolia* Andr. The climbers so far enumerated embrace the plants of medicinal, horticultural and economic categories already stated in various standard text-books.

## REFERENCES

- ANDERSON, T.  
1865 Catalogue of plants cultivated in Royal Botanic Gardens, Calcutta. *Bishop's College Press*. Calcutta.
- BENTHAM, G. & HOOKER, J. D.  
1862-1883 *Genera Plantarum*. 3 Vols. London.
- GAGE, A. T.  
1912 Catalogue of Non-herbaceous phanerogams cultivated in the Royal Botanic Gardens, Calcutta. *Rec. Bot. Surv. Ind.* 5: 1-367.
- MITRA, S. N., GHOSH, R. B. et. al.  
1971 A census to the Aquatic and Semi-Aquatic vegetation of the Indian Botanic Garden, Howrah. *Bull. Botan. Soc. Beng.* 25 (1 & 2): 111-115.
- RAIZADA, M. B.  
1958 Name changes in common Indian Plants. *Ind. Forester* 84 (8): 467-538.  
1966 Nomenclatural changes in Indian Plants. *Ibid.* 92 (5): 299-339.  
1968 Some name changes in Flora of India, *Ibid* 94 (6): 432-462.
- SANTAPAU, H. & WAGH, S. K.  
1963 Nomenclatural changes in Indian Plants. *Bull. Bot. Surv. India*, 5 (2): 105-109.
- SEN, J. & NASKAR, J. N.  
1965 Non-herbaceous phanerogams of the Indian Botanic Garden, Calcutta. *Bull. Bot. Surv. India*, 7 (1,4): 31-61.