

## ENUMERATION OF CLIMBING ANGIOSPERMS IN AND AROUND RAJSHAHI CITY, BANGLADESH

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Climbing angiosperms generally called as climbers are groups consists of plants that are rooted in the ground and capable to climbing up with the help of neighboring support such as plants or other objects. Climbers are found in a majority of the world's forests but a good number of climbers are also found in the non forest area such as villages, urbanized areas, and besides agricultural fields, railway tracks, highway sides, river or canal banks, garden and grove. They are part of biological spectra of forest ecosystems, on the other hand it constitute a large and important sector of ornamental horticulture due to its flowers and an astonishing range of colors. Therefore, an inventory of climber plants of an area or forest is essential not only from taxonomic point of view but also for resource management and developmental planning.

The importance of studying local floristic diversity of climbing angiosperm has been realized and carried out in deferent location by several researchers such as Bandyopadhyay and Mukherjee (2010), Patel *et al.* (2013), Gianoli (2015), Kensa *et al.* (2015), Sarvalingam and Rajendran (2015), Vargas *et al.* (2018), Birhane *et al.* (2020), Subramanian *et al.* (2020) but in Bangladesh, few studies (Rahman *et al.*, 2010; Hossain *et al.*, 2015; Rani *et al.*, 2019) on climber diversity were done so far. The present work is the outcome of extensive survey at different corners of Rajshahi city and its surroundings in different seasons from January 2020 to December 2020. The area of Rajshahi city is 95.56 sq km and located in between 24'20' and 24'24' north latitudes and 88'32' and 88'40' east longitudes. Under Koppen climate classification, Rajshahi has a tropical wet and dry climate. Collected specimens were identified up to species with the help of Ahmed *et al.* (2009), Uddin and Hassan (2018), relevant literature and online flora. The up-to-date botanical nomenclature and local name has been cited based on "Plants of the world online (<http://www.plantsoftheworldonline.org>)" and Pasha and Uddin (2013) respectively. Specimens have been deposited at Department of Botany, Abdulpur Government College, Natore, Bangladesh. During the study, 91 climbers belonging to 29 families were observed and are presented in Table 1. Among the record species, 47 were found wild and the rest were found as a cultivated species. The highest numbers of the wild species were collected from highway sides followed by railway tracks. Out of 44 cultivated species, 23 species were recorded as ornamental. Usually, the city dweller likes ornamental plant that gives flowers or beautification in the garden or in front of residence. They like vines to creep along the tops of walls, twine up pillars and posts and bestride gateways. Most of the enumerated climbers were woody vine and the major climbing modes were twiner. Rani *et al.* (2019) did an extensive floristic survey of climbers and recorded 88 climbers of 25 families from Rajshahi district. Earlier, Rahman (2013) reported 52 climbers in a floristic survey of Rajshahi district. In the present investigation, Cucurbitaceae was found as a major family consisting of eighteen species followed by Convolvulaceae and Fabaceae consisting of thirteen and ten genera respectively. On the basis of observation, the state of occurrence has been noted as very common, common and occasional.

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In this study, 19 wild species were occasionally found. Proper conservation measures should be required to increase their abundance.

**Table 1.**List of the climber species in and around Rajshahi city.

Sl No.	Scientific name	Family	Local Name	Status	Habit	Climbing modes	Category
01	<i>Abrus precatorius</i> L.	Fabaceae	Kunch	Oc	Wd	Tw	WC
02	<i>Allamanda cathartica</i> L.	Apocynaceae	Ghantaphul	VC	CV	Tw	WC
03	<i>Ampelocissus latifolia</i> (Roxb.) Planch.	Vitaceae	Gowalia-lata	Co	Wd	Tn	WC
04	<i>Antigonon leptopus</i> Hook. & Arn.	Polygonaceae	Anantalata	Co	CV	Tn	WC
05	<i>Aristolochia indica</i> L.	Aristolochiaceae	Isharmul	Oc	Wd	Tw	WC
06	<i>Artabotrys hexapetalus</i> (L.f.) Bhandari	Annonaceae	Kanthalichapa	Co	CV	Ho	WC
07	<i>Asparagus racemosus</i> Willd.	Asparagaceae	Shotomuli	VC	CV	Ho	WC
08	<i>Basella alba</i> L.	Basellaceae	Puishak	VC	CV	Tw	HC
09	<i>Benincasa hispida</i> (Thunb.) Cogn.	Cucurbitaceae	Chalkumra	VC	CV	Tn	HC
10	<i>Bougainvillea glabra</i> Choisy	Nyctaginaceae	Baganbilas	VC	CV	Tw	WC
11	<i>Brachypterum scandens</i> (Roxb.) Miq.	Fabaceae	Kalilata	Co	Wd	Tw	WC
12	<i>Calamus tenuis</i> Roxb.	Arecaceae	Bet	Oc	Wd	Ho	WC
13	<i>Campsis radicans</i> (L.) Bureau	Bignoniaceae	Turilata	Oc	CV	RC	WC
14	<i>Capparis zeylanica</i> L.	Capparaceae	Kalkera	Co	Wd	Ho	WC
15	<i>Cardiospermum halicacabum</i> L.	Sapindaceae	Lataphutiki	Oc	Wd	Tn	HC
16	<i>Causonis trifolia</i> (L.) Mabb.&J.Wen	Vitaceae	Amollata	VC	Wd	Tn	WC
17	<i>Cayratia pedata</i> (Lam.) Gagnep.	Vitaceae	Goalilata	Oc	Wd	Tn	WC
18	<i>Cissus adnata</i> Roxb.	Vitaceae	Vatialata	Oc	Wd	Tn	WC
19	<i>Cissus quadrangularis</i> L.	Vitaceae	Harjora	VC	CV	Tn	WC
20	<i>Citrullus lanatus</i> (Thunb.) Matsum.&Nakai	Cucurbitaceae	Tarmuj	Oc	CV	Tn	HC
21	<i>Clematis gouriana</i> Roxb. ex DC.	Ranunculaceae	Chagolboti	Oc	CV	Tn	WC
22	<i>Clerodendrum splendens</i> G.Don	Lamiaceae	Shum bhat	VC	CV	Tw	WC
23	<i>Clerodendrum thomsoniae</i> Balf.f.	Lamiaceae	Hridoyhara	Oc	CV	Tw	WC
24	<i>Clitoria ternatea</i> L.	Fabaceae	Aparajita	VC	CV	Tw	WC
25	<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	Telakucha	VC	Wd	Tn	WC
26	<i>Cocculus hirsutus</i> (L.) W.Theob.	Menispermaceae	Jaljamani	VC	Wd	Tw	WC
27	<i>Combretum indicum</i> (L.) DeFilipps	Combretaceae	Madhabilata	VC	CV	Tw	WC
28	<i>Cryptolepis buchmanii</i> R.Br. exRoem. &Schult.	Apocynaceae	Karanta	Oc	Wd	Tw	WC
29	<i>Cucumis maderaspatanus</i> L.	Cucurbitaceae	Agamukhe	VC	Wd	Tn	HC
30	<i>Cucumis melo</i> L.	Cucurbitaceae	KalluBangi	Co	Wd	Tn	HC
31	<i>Cucumis sativus</i> L.	Cucurbitaceae	Sasa	Co	CV	Tn	HC
32	<i>Cucurbita maxima</i> Duchesne	Cucurbitaceae	Mistikumra	VC	CV	Tn	HC
33	<i>Cucurbita pepo</i> L.	Cucurbitaceae	Sadakadu	Oc	CV	Tn	HC
34	<i>Daemonorops jenkinsiana</i> (Griff.) Mart.	Arecaceae	Golla bet	Oc	CV	Ho	WC
35	<i>Dioscorea alata</i> L.	Dioscoreaceae	Chuprialu	VC	CV	Tw	HC

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36	<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	Ratalu	Oc	CV	Tw	HC
37	<i>Dioscorea pentaphylla</i> L.	Dioscoreaceae	Jumalu	Oc	CV	Tw	HC
38	<i>Epipremnum aureum</i> (Linden & André) G.S.Bunting	Araceae	Money plant	VC	CV	RC	WC
39	<i>Ficus pumila</i> L.	Moraceae	Latadumur	Oc	CV	RC	WC
40	<i>Hemidesmus indicus</i> (L.) R.Br.	Apocynaceae	Anontomul	Oc	Wd	Tw	WC
41	<i>Hewittia malabarica</i> (L.) Suresh	Convolvulaceae	Hiwet	Oc	Wd	Tw	HC
42	<i>Ichnocarpus frutescens</i> (L.) W.T.Aiton	Apocynaceae	Shamlata	Co	Wd	Tw	WC
43	<i>Ipomoea alba</i> L.	Convolvulaceae	Dudhkolmi	Co	Wd	Tw	HC
44	<i>Ipomoea aquatica</i> Forssk.	Convolvulaceae	Kalmi	VC	CV	Tw	HC
45	<i>Ipomoea batatas</i> (L.) Lam.	Convolvulaceae	Mistialu	Oc	CV	Tw	HC
46	<i>Ipomoea cairica</i> (L.) Sweet	Convolvulaceae	Rail lata	Oc	CV	Tw	HC
47	<i>Ipomoea coccinea</i> L.	Convolvulaceae	Lalkolmi	Co	CV	Tw	HC
48	<i>Ipomoea nil</i> (L.) Roth	Convolvulaceae	Nil komol	Co	Wd	Tw	HC
49	<i>Ipomoea obscura</i> (L.) Ker Gawl.	Convolvulaceae	Kura kalmi	Oc	Wd	Tw	HC
50	<i>Ipomoea pes-tigridis</i> L.	Convolvulaceae	Langulilata	Co	Wd	Tw	HC
51	<i>Ipomoea quamoclit</i> L.	Convolvulaceae	Kunjolata	VC	CV	Tw	HC
52	<i>Ipomoea triloba</i> L.	Convolvulaceae	Ghontikolmi	Co	Wd	Tw	HC
53	<i>Jasminum sambac</i> (L.) Aiton	Oleaceae	Beli	Co	Wd	Tw	WC
54	<i>Lablab purpureus</i> (L.) Sweet	Fabaceae	Shim	VC	CV	Tw	HC
55	<i>Lagenaria siceraria</i> (Molina) Standl.	Cucurbitaceae	Lau	VC	CV	Tn	HC
56	<i>Leptospron adenanthum</i> (G.Mey.) A.Delgado	Fabaceae	Bon barboti	Oc	Wd	Tw	HC
57	<i>Luffa acutangula</i> (L.) Roxb.	Cucurbitaceae	Jhinga	Co	CV	Tn	HC
58	<i>Luffa aegyptiaca</i> Mill.	Cucurbitaceae	Dhundal	VC	CV	Tn	HC
59	<i>Mansoa alliacea</i> (Lam.) A.H.Gentry	Bignoniaceae	Rasunlata	Co	CV	Tw	WC
60	<i>Merremia hederacea</i> (Burm.f.) Hallier f.	Convolvulaceae	Kaladana	VC	Wd	Tw	HC
61	<i>Mikania micrantha</i> Kunth	Asteraceae	Asamlata	VC	Wd	Tw	WC
62	<i>Momordica charantia</i> L.	Cucurbitaceae	Korolla	Co	CV	Tn	HC
63	<i>Momordica subangulata</i> Blume	Cucurbitaceae	Kakrol	Oc	CV	Tn	HC
64	<i>Mucuna pruriens</i> (L.) DC.	Fabaceae	Alakusi	Oc	Wd	Tw	WC
65	<i>Operculina turpethum</i> (L.) Silva Manso	Convolvulaceae	Dudhkalmi	VC	Wd	Tw	HC
66	<i>Pachyrhizus erosus</i> (L.) Urb.	Fabaceae	Kesur	Oc	CV	Tw	HC
67	<i>Paederia foetida</i> L.	Rubiaceae	Gandhabhaduli	Co	Wd	Tw	WC
68	<i>Passiflora foetida</i> L.	Passifloraceae	Jhumkolata	Oc	Wd	Tn	WC
69	<i>Passiflora suberosa</i> L.	Passifloraceae	Melajhumka	VC	Wd	Tn	WC
70	<i>Pentalinon luteum</i> (L.) B.F.Hansen & Wunderlin	Apocynaceae	Alokmanda	Oc	CV	Tw	WC
71	<i>Pergularia daemia</i> (Forssk.) Chiov.	Apocynaceae	Dudhilata	Co	Wd	Tw	HC
72	<i>Pyrostegia venusta</i> (Ker Gawl.) Miers	Bignoniaceae	Sonalilota	Oc	CV	Tw	WC

Sl No.	Scientific name	Family	Local Name	Status	Habit	Climbing modes	Category
73	<i>Scindapsus officinalis</i> (Roxb.) Schott	Araceae	Gojpipul	Oc	Wd	RC	HC
74	<i>Smilax perfoliata</i> Lour.	Smilacaceae	Kumarilata	Oc	Wd	Tn	WC
75	<i>Solena amplexicaulis</i> (Lam.) Gandhi	Cucurbitaceae	Kundri	Oc	Wd	Tn	HC
76	<i>Stephania japonica</i> (Thunb.) Miers	Menispermaceae	Nimuka	VC	Wd	Tw	HC
77	<i>Syngonium podophyllum</i> Schott	Araceae	Podolatakachu	VC	Wd	RC	HC
78	<i>Telosma pallida</i> (Roxb.) Craib	Apocynaceae	Kanjolata	VC	Wd	Tw	WC
79	<i>Teramnus labialis</i> (L.f.) Spreng.	Fabaceae	Mashani	Oc	Wd	Tw	HC
80	<i>Thunbergia coccinea</i> Wall. exD.Don	Acanthaceae	Raktimlata	Oc	CV	Tw	WC
81	<i>Thunbergia erecta</i> (Benth.) T.Anderson	Acanthaceae	Neelghonto	Oc	CV	Tw	WC
82	<i>Tiliacora acuminata</i> (Lam.) Miers	Menispermaceae	Tiliacora	VC	Wd	Tw	WC
83	<i>Tinospora cordifolia</i> (Willd.) Hook.f. & Thomson	Menispermaceae	Guloncho	VC	Wd	Tw	HC
84	<i>Tragia involucrata</i> L	Euphorbiaceae	Bichuti	Oc	Wd	Tw	WC
85	<i>Trichosanthes costata</i> Blume	Cucurbitaceae	Batijhinga	Oc	Wd	Tn	HC
86	<i>Trichosanthes cucumerina</i> L.	Cucurbitaceae	Bon chichinga	VC	Wd	Tn	HC
87	<i>Trichosanthes dioica</i> Roxb.	Cucurbitaceae	Potol	Co	CV	Tn	HC
88	<i>Trichosanthes tricuspidata</i> Lour.	Cucurbitaceae	Makal	Co	Wd	Tn	WC
89	<i>Vicia sativa</i> L.	Fabaceae	Ankari	VC	Wd	Tn	HC
90	<i>Vigna unguiculata</i> (L.) Walp.	Fabaceae	Barbati	Oc	CV	Tw	HC
91	<i>Vitis vinifera</i> L.	Vitaceae	Angur	Co	CV	Tn	WC

**Habit:** CV= Cultivated and Wd= Wild; **Status:** Co= Common, Oc= Occasional and VC= Very common; **Climbing modes:** Ho= Hook climber, RC= Root climber, Tn= Tendril climbers and Tw= Stem twiners; **Category:** HC= Herbaceous climber and WC= Woody climber.

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