

# Flora of India Vol. 28

(24 families; 111 genera; 581 species)

Pontederiaceae to Juncaginaceae

Team Leader: Dr. M.U. Sharief

## Team members:

Dr. S.S. Hameed

Dr. Vinay Ranjan

Dr. Rajib Gogoi

Dr. B.K. Singh

Dr. Anant Kumar

Dr. Sashikala

Dr. Mayur Nandikar

Dr. R.V. Gurav

Dr. Geetha Chetri

Date of initiation: April-2019

Date of completion: August-2020

## Allotment of Flora of India

Sl. No.	Flora of India Project	Period	Team Leader / Members
1.	Flora of India, Vol.10	2019 – March 2020	Team Leader: Dr B. K. Sinha, Scientist F (Retd.) / Dr. S.S.Dash, Scientist E
2.	Flora of India, Vol. 11	2019 – March 2020	Team Leader: Dr. C. Murugan, Scientist E
3.	Flora of India, Vol. 16	2019 – March 2020	Team Leader: Dr. W. Ariadason, Scientist D
4.	Flora of India, Vol. 17	2018 – March 2020	Team Leader: Dr. J. Jayanthi, Scientist E
5.	Flora of India, Vol. 18	2019 – March 2020	Team Leader: Dr. S. L. Meena, Scientist E
6.	Flora of India, Vol.19	2019 – March 2020	Team Leader: Dr. Arti Garg, Scientist E
7.	Flora of India, Vol. 20	2018 – Aug. 2019	Team Leader: Dr. P. Lakshminarasimhan, Scientist E
8.	Flora of India, Vol. 21	2019 – June 2020	Team Leader: Dr V. Sampath Kumar, Scientist E
9.	Flora of India, Vol. 22	2019 – March 2020	Team Leader: Dr. Manas Bhaumik, Scientist E
10.	Flora of India, Vol. 24	2019 – March 2020	Team Leader: Dr. P. K. Pusalkar, Scientist E
11.	Flora of India, Vol. 25 & 26	2019 to June 2020	Team Leader: Dr. D. K. Agrawala, Scientist D
12.	Flora of India, Vol. 27	2019 to June 2020	Team Leader: Dr. Rajib Gogoi, Scientist E
13.	Flora of India, Vol. 28	2019 – June 2020	Team Leader: Dr. M. U. Sharief, Scientist E
14.	Flora of India, Vol. 29	2019 – March 2020	Team Leader: Dr. V. P. Prasad, Scientist E (Retd.)
15.	Flora of India, Vol. 30	2019 – Dec. 2019	Team Leader: Dr. Pushpakumari, Scientist D
16.	Flora of India, Vol. 31 & Vol. 32	2019 – June 2020	Team Leader: Dr. P.V. Prasanna, Scientist G

# Families under Flora of India, Vol. 28

## 24 families

- **Alismataceae**
- **Araceae**
- **Butomaceae**
- **Cymodoceaceae**
- **Juncaceae**
- **Lemnaceae**
- **Najadaceae**
- **Philydraceae**
- **Potamogetonaceae**
- **Trilliaceae**
- **Typhaceae**
- **Xyridaceae**
- **Aponogetonaceae**
- **Arecaceae**
- **Commelinaceae**
- **Flagellariaceae**
- **Juncaginaceae**
- **Limnocharitaceae**
- **Pandanaceae**
- **Pontederiaceae**
- **Ruppiaceae**
- **Triuridaceae**
- **Uvulariaceae**
- **Zannichelliaceae**

# Allotment/Distribution of families

Sl. No.	Name of the Team Member	Family Allotted
1.	<b>Dr. M. U. Sharief</b> <b>Team Leader</b>	Pontederiaceae, Philydraceae, Commelinaceae, Flagellariaceae, Limnocharitaceae, Alismataceae Uvulariaceae, Triliaceae
2.	Dr. Vinay Ranjan	Xyridaceae, Typhaceae, Ruppiaceae
3.	Dr. S.S. Hameed	Pandanaceae, Arecaceae
4.	Dr. B.K. Singh	Potamogetonaceae, Aponogetonaceae Najadaceae
5.	Dr. Anant Kumar	Triuridaceae, Butomaceae, Zannichelliaceae Cymodoceaceae, Lemnaceae
6.	Dr. Rajib Gogoi	Juncaceae, Juncaginaceae
7.	Dr. Shashikala	Araceae
8.	Dr. Mayur Nandikar	Commelinaceae

# ARECACEAE

Across the world - about **183** genera and **2500** species reported (Dransfield et al. 2008). In India, **106** species reported under **20** genera. There are nearly **120** cultivated species (exotic), the number of which being increased annually due to import of exotic species for ornamental cultivation.

1. Areca
2. Arenga
3. Bentinckia
4. Borassus
5. Caryota
6. Calamus
7. Corypha
8. Daemonorops
9. Hyphaene
10. Korthalsia
11. Licuala
12. Livistona
13. Nypa
14. Phoenix
15. Pinanga
16. Plectocomia

17. Rhopaloblaste
18. Salacca
19. Trachycarpus
20. Wallichia





**Plate 2:** a-c. *Calamus andersonianus* Kurz: a. Habit; b. Close view of stem; c. Fruits; d-f. *Calamus longisetus* Griff.: d. Habit; e. Close view of stem; c. Fruits.



**Plate 6:** a-d. *Phoenix rupicola* T. Anderson: a. Wild habitat; b. Wild population; c. Habit; d. Fruits; e-f. *Phoenix sylvestris* Roxb.: e. Habit; f. Crown with fruits.





**Plate 8:** a. *Caryota mitis* Lour.: Habit; b. *Caryota maxima* Blume.: Habit; c. *Caryota urens* L.: Habit; d. *Licuala spinosa* Roxb.: Habit; e-f. *Livistona jenkinsiana* Griff. (Toko Palm): e. Habit; f. fruits.



**Plate 10:** a-b. *Corypha taliera* Roxb.: a. Habit; b. Inflorescence; c-d. *Corypha umbraculifera* L.: c. In flowering condition; d. Fruits; e-f. *Corypha utan* Lam.: e. Habit; f. Crown in fruiting.





**Plate 12: a-b. *Areca catechu* L.:** a. Habit; b. Fruit; **c-d. *Areca triandra* Roxb.:** c. Habit; d. Fruits; **e-f. *Pinanga manii* Becc.:** e. Habit; f. Immature fruit.



**Plate 13: a-c. *Bentinckia condappana* Berry:** a. Habit in S.W. Ghats; b. Habit; c. Berry; **d. *Bentinckia nicobarica* Becc.:** Habit & fruits; **e-f. *Pinanga dicksonii* Bl.:** e. Habit; f. In fruiting.





Pandanus mangalorensis

Pandanus nepalensis





Plate 1. (A) *Amischotolype hookeri* (Hassk.) H. Hara; (B) *Belosynapsis vivipara* (Dalzell) C.E.C. Fisch.; (C) *B. kewensis* Hassk.; (D) *Cyanotis nilagirica* Hassk.; (E) *Cyanotis arcotensis* R. S. Rao



Plate 4. (A) *Commelina Africana* subsp. *zangibarica* Faden; (B) *C. badamica* S. M. Joseph & Nampy; (C) *C. attenuata* K.D.Koenig ex Vahl; (D) *C. badamica* Nandikar & Gurav; (D) *C. benghalensis* L.; (E) *C. clavata* C. B. Clarke



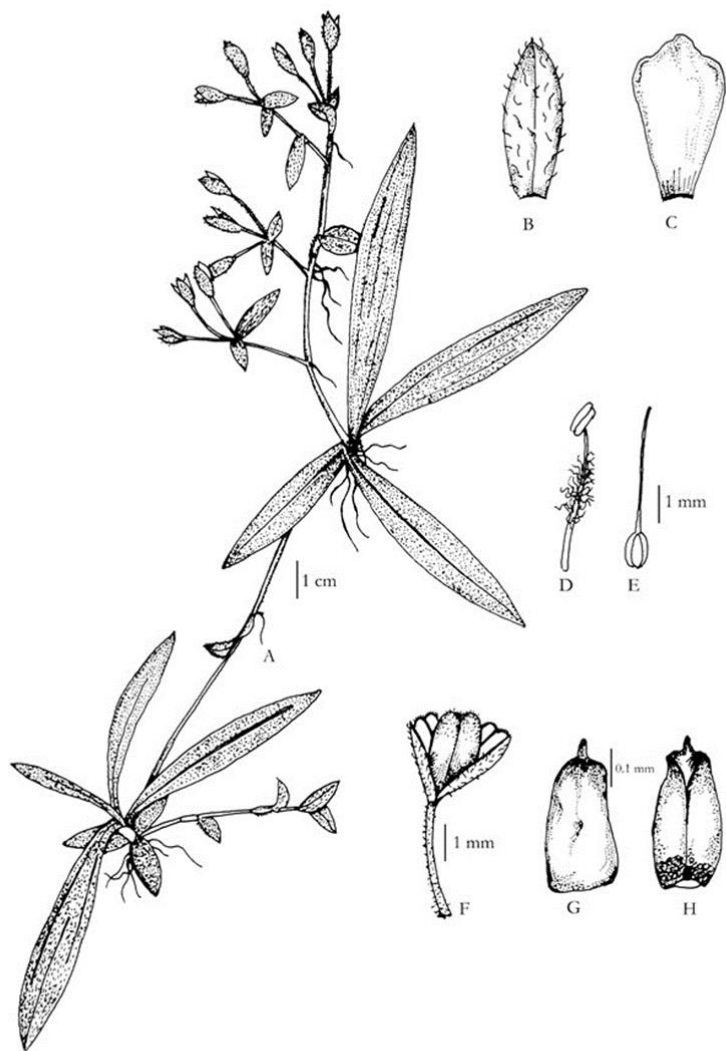


Plate 9. (A) *Murdannia dimorpha* G. Brückn.; (B) *M. edulis* (Stokes) Faden; (C) *M. gigantea* (Vahl) G. Brückn.; (D) *M. japonica* (Thunb.) Faden; (E) *M. lanuginosa* (Wall. ex C.B. Clarke) G. Brückn.; (F) *M. loriformis* (Hassk.) R. S. Rao & Kammathy

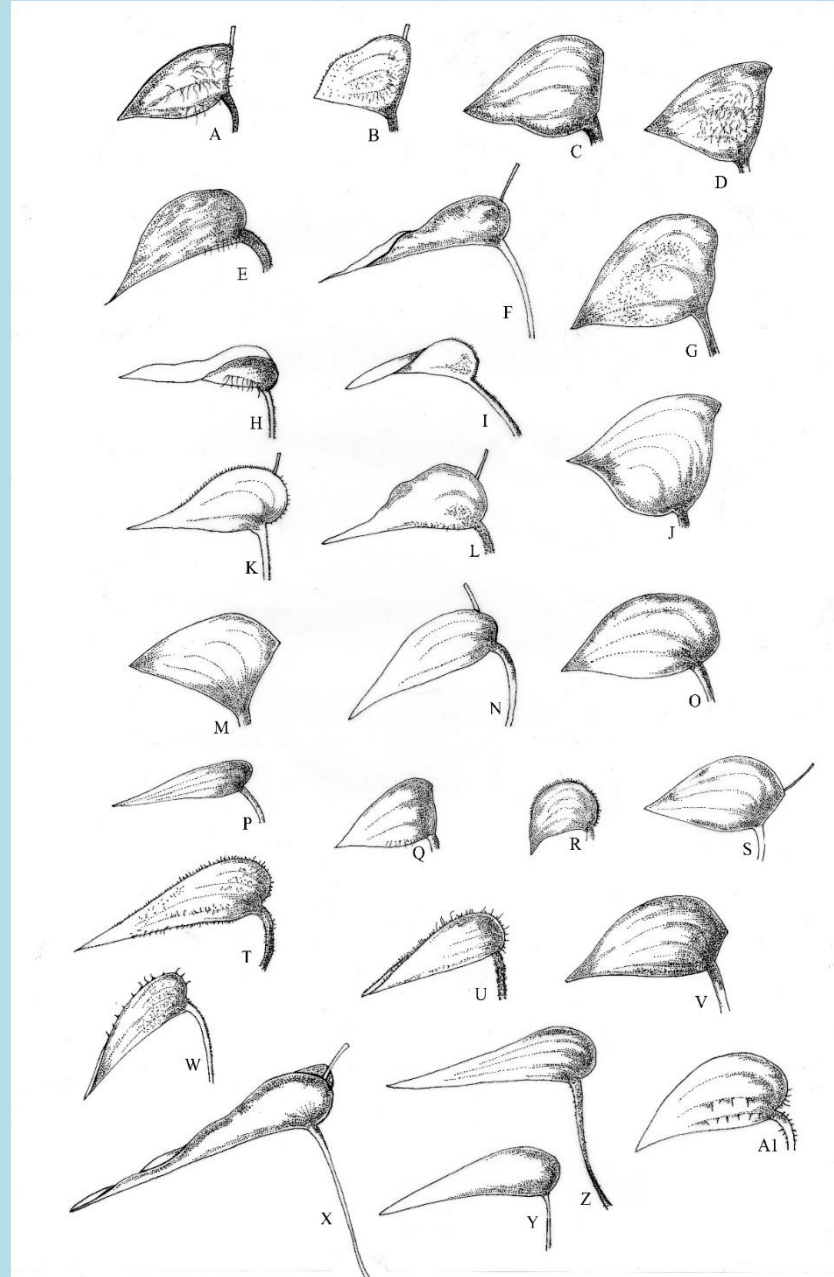


Plate 12. (A & B) *Pollia secundiflora* (Blume) Bakh. f.; (C & D) *P. thysiflora* (Blume) Steud.; (E) *P. hasskarlii* R. S. Rao.; (F) *Aneilema scaberrimum* Blume





**Fig. 4.** *Belosynapsis vivipara* (Dalzell) Fischer: **A.** Habit, **B.** Sepal, **C.** Petal, **D.** Stamen, **E.** Pistil, **F.** Capsule, **G** and **H.** Dorsal and ventral view of seed



**Fig. 5:** Spathe diversity in *Commelina*. **A.** *C. forskaoii*, **B.** *C. benghalensis*, **C.** *C. undulata*, **D.** *C. maculata*, **E.** *C. indehiscens*, **F.** *C. sikkimensis*, **G.** *C. paleata*, **H.** *C. africana* subsp. *zanzibarica*, **I.** *C. caroliniana*, **J.** *C. paludosa*, **K.** *C. wightii*, **L.** *C. clavata*, **M.** *C. andamanica*, **N.** *C. diffusa*, **O.** *C. petersii*, **P.** *C. attenuata*, **Q.** *C. ensifolia*, **R.** *C. subulata*, **S.** *C. imberbis*, **T.** *C. rupestris*, **U.** *C. hirsuta*, **V.** *C. suffruticosa*, **W.** *C. badamica*, **X.** *C. appendiculata*, **Y.** *C. tricolor*, **Z.** *C. longifolia*, **AI** *C. littoralis*

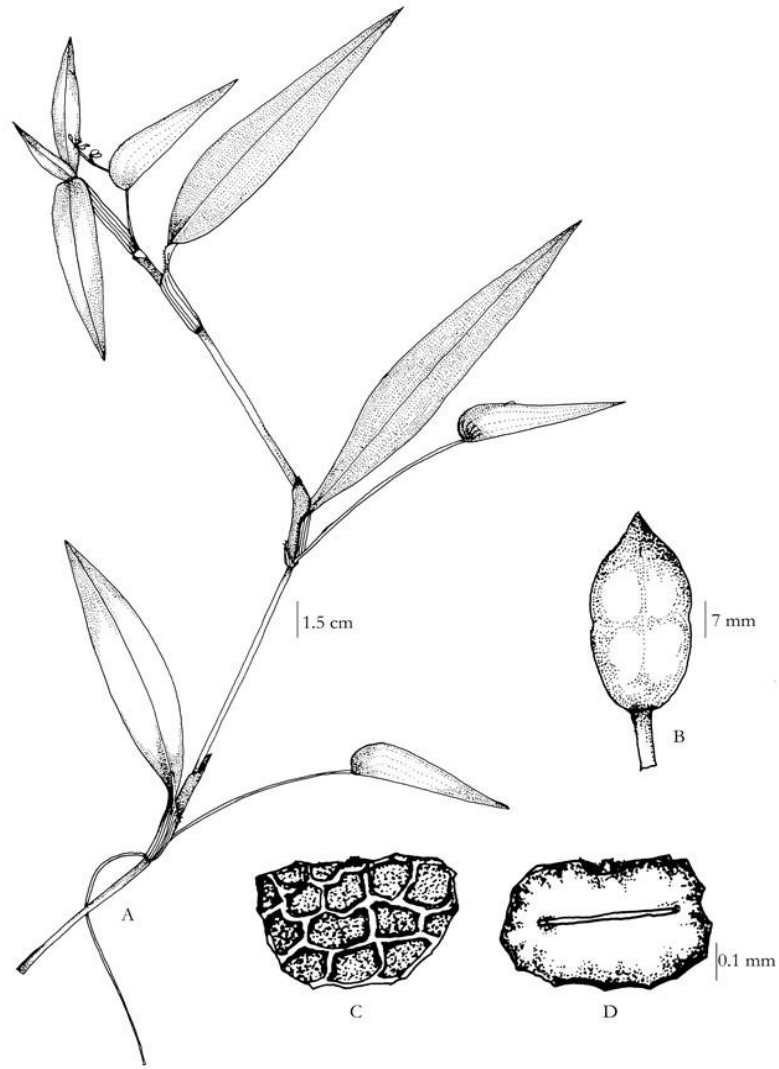


Fig. 6. *Commelina clavata* C. B. Clarke A. Habit, B. Capsule, C. & D. Dorsal and ventral view of seed

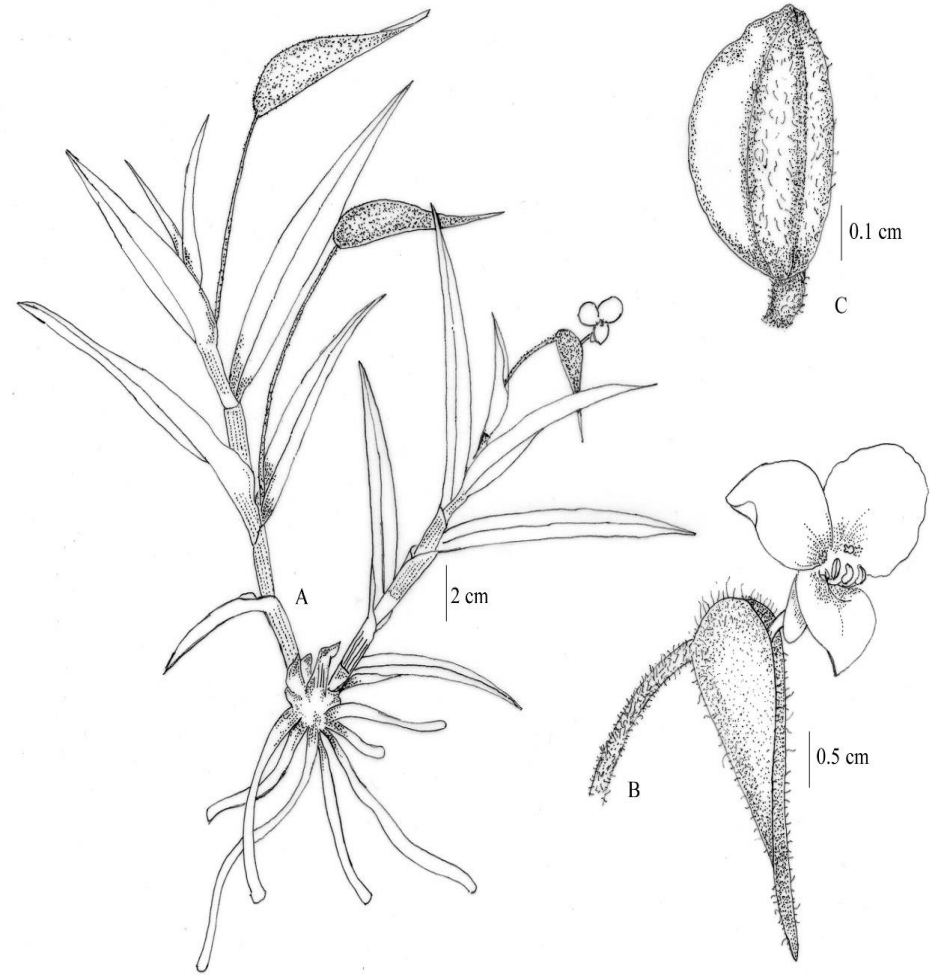


Fig. 8. *Commelina hirsuta* (Wight) Beddome A. Habit; B. Inflorescence; C. Capsule

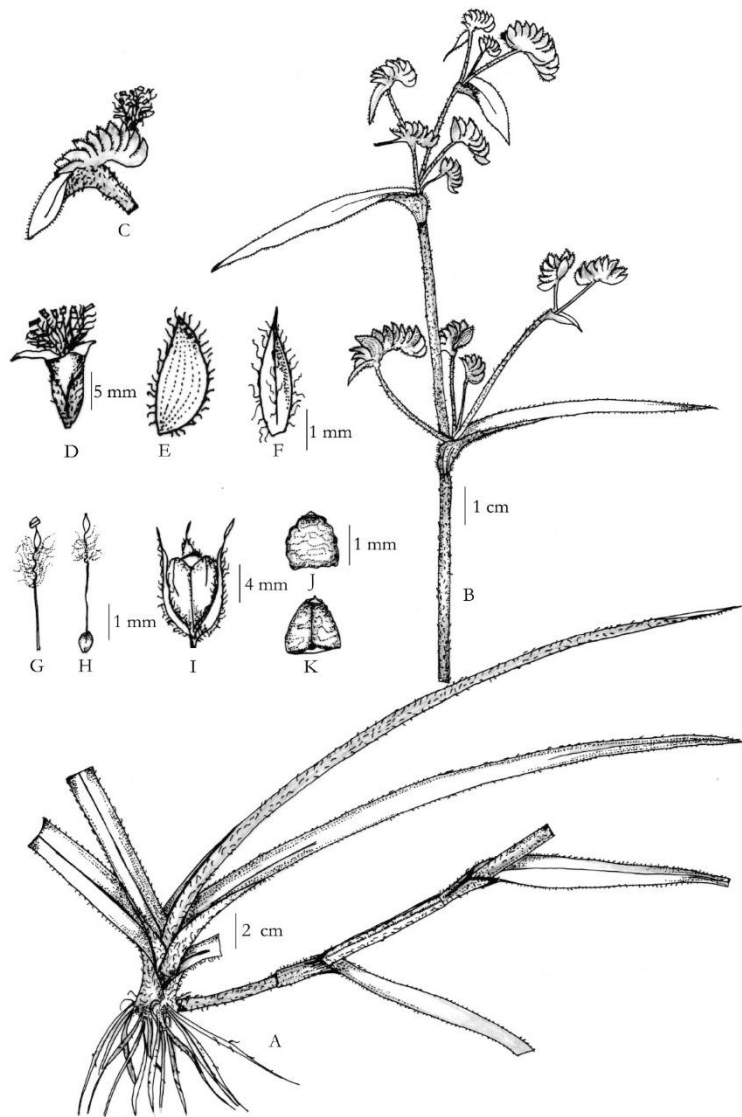


Fig. 11. *Cyanotis tuberosa* (Roxb.) Schult. f. A: Habit, B: Flowering scape, C: Inflorescences, D: Flower, E: Bracteole, F: Sepal, G: Stamen, H: Pistil, I: Capsule, J & K: Seeds dorsal and ventral view. M.D.Nandikar C902 & Gurav & Nandikar C112 (SUK).



Fig. 13. *Cyanotis hispida* Dalzell: A: Habit, B: Flowering shoots, C: Inflorescences, D: Flower, E: Stamen, F: Pistil, G: Capsule, H: Seeds dorsal and ventral view respectively. Gurav & Nandikar C1110 (BLAT).

# Achievements

- Final manuscript of the volume 28 for Flora of India consisting of 24 families; 111 genera; 581 species for the families from Pontederiaceae to Juncaginaceae submitted to the Director, BSI, Kolkata on 10.08.2020 along with photoplates, Illustrations and individual photographs depicting plants.

**Thank you**