Species Datasheet

Datasheet No. A-078.001.008
(family.genus.species)

DBT- Network Programme

1.Taxon:
Species**:** *Commelina erecta* L.
Subspecies**:**
Variety**:**
Cultivar**:**
Hybrid**:**

Image file

2. Synonyms:*Commelina aethiopica* C.B.Clarke, *C. angustifolia*Hassk., *C. bahiensis*Hoffmanns. exSpreng., *C. bahiensis*Willd. exRoem. & Schult., *C. bainesii* C.B.Clarke, *C. elegans* Kunth, *C. elegans* var. *glabriuscula*Seub., *C. elegans* var. *hirsuta*Standl., *C. ensifolia* F.Muell., *C. erecta* f. *alba*Magrath, *C. erecta* f. albina Fernald, *C. erecta* f. *cana*Standl. &Steyerm.,*C. erecta* f. *candida*Standl. &Steyerm., *C. erecta* subsp. *erecta*, *C. erecta* f. *erecta*, *C. erecta* var. *glochidea* (K.D.Koenig ex C.B.Clarke) Bhargavan,*C. erecta* var. *greenei*Fassett, *C. erecta* f. *intercursa* Fernald, *C. gerrardii* C.B.Clarke, *C. guineensis*Hua, *C. hirsuta*Willd. exSpreng., *C. kurzii* var. *glochidea* K.D.Koenig ex C.B.Clarke, *C. martiana*Seub., *C. pohliana*Seub., *C. saxicola* Small, *C. setosa* Wight ex Wall., *C. sulcata*Hoffmanns. exSpreng., *C. sulcata*Benth., *C. sulcata*Willd. exRoem. & Schult., *C. undulata* var. *densivestita*Domin, *C. venusta* C.B.Clarke, *C. virginica* var. *australis* C.B.Clarke, *C. virginica* var. *massonii* C.B.Clarke, *C. virginica* var. *villosa* C.B.Clarke, *C. vogelii* C.B.Clarke

3. Systematic position:

APG IV (2016)
- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Commelinales Mirb. exBercht. & J. Presl
- Family: Commelinaceae Mirb.
- Genus: *Commelina* L.
- Species: *C. erecta*L.

Bentham and Hooker (1862)
Kingdom: Plantae
Division:Phanerogamia
Class: Monocotyledones
Series: Coronarieae
Ordo: Commelinaceae Mirb.
Genus: *Commelina* L.
Species: *C. erecta* L.

4.Distribution:

Global: Arabian Peninsula Saudi Arabia,Argentina Northwest,Arkansas,Bahamas,Bermuda,Brazil South,Brazil Southeast,Brazil West-Central,Brazil Brazil Northeast,Burkina,Cameroon,Cape Provinces,Caribbean Aruba,Cayman Island,Central African Republic,Centra America Belize,Colombia,Congo,Costa Rica,Cuba,Delaware,District of Columbia,Dominican Republic,East Tropica Africa Kenya,Ecuador,El Salvador,Ethiopia,Florida,Free State,Gambia,The,Georgia,Ghana,Guatemala,Guinea,Guinea-Bissau,Gulf c Guinea Island,Guyana,Haiti,Honduras,Iowa,Ivory Coast,Jamaica,Kansas,Kentucky,KwaZulu-Natal,Leewar Island,Liberia,Louisiana,Macaronesia Cape Verde,Malawi,Mali,Maryland,Mexico Gulf,Mexico Northeast,Mexico Northwest,Mexic Southeast,Mexico Southwest,Mexico Mexico Central,Mississippi,Missouri,Mozambique,Namibia,Nebraska,Netherlands Antilles,Nev Jersey,New York,Nicaragua,Niger,Nigeria,North Carolina,North-Central U.S.A. Illinois,Northeast Tropical Africa Chad,Northeastern U.S.A. Indiana,Northern Provinces,Northern South America French Guiana,Northwestern U.S.A. Colorado,Oklahoma,Panama,Paraguay,Pennsylvania,Peru,Puerto Rico,Rhode I.,Rwanda,Senegal,Sierra Leone,Somalia,Sou Carolina,South Dakota,South Tropical Africa Angola,South-Central U.S.A. New Mexico,Southeastern U.S.A. Alabama,Souther Africa Botswana,Southern South America Argentina Northeast,Southwest Caribbean,Southwestern U.S.A. Arizona,Sudan,Suriname,Swaziland,Tanzania,Tennessee,Texas,Togo,Trinidad-Tobago,Uganda,Uruguay,Venezuela,Venezuelan Antilles,Virginia,West Tropical Africa Benin,West Virginia,West-Central Tropical Africa Burundi,Western South America Bolivia,Windward Island,Wyoming,Yemen,Zaire,Zimbabwe

India: Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu

5.Indigenous/Exotic/Endemic;Cultivated/Wild: Wild

6.Threat Status:

IUCN: Least Concern

BSI:

7.Habit and Habitat: Herb,Loamy or sandy soils or rocky slopes, a weed in cultivated ground

8.Life Form: Tuberous geophyte

9.Economic Importance: It is used in the treatment of wounds;it is macerated in rum and then rubbed on spider bites to bring relief

10. Probable Progenitor of:

11.DNA

C-value	**Methodology:**
(2C: 5.1-8.5pg.; **4C:** 10.3-17.0pg.)[35]	Feulgen Microdensitomitry (Fe)[35]

12.Basic chromosome number(s):x=15[35,37,40,42]

13. Zygotic chromosome number(s):2n=52[35,64]56[17,33,41,67]60[33,35,40,41,44,63,68]90[33]112[33]120[33,41]

14. Gametic chromosome number(s):n= 30[33,37,40,42]60[37]

15.Specialized chromosomes (B chromosomes/Sex chromosomes/polytene chromosomes/Neocentric chromosomes):

Image file

16.Ploidy level: Tetraploid[35,37,40,42]Octaploid[37]

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo): Allopolyploidy[40,42]

19.Genomic formula:

20.Aberrant chromosome number(s)(aneuploidy, aneusomaty, polysomaty):

21.Somatic chromosomes:

Karyotype:(30m+26sm+4st)[40]
Chromosome size: Medium size
NOR chromosome(s):2NOR[40]
Degree of asymmetry:2A[40]
Image file

22. Banding pattern(s):

Image file

23. Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization

Image file

24.Genomic in situ hybridization:

Image file

25. Linkage map:

Image file

26.Chromosome associations:

Female meiosis:

Male meiosis:$30II^{40,42}$, $15.10II+29.66I^{42}$

Image file

27.Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level:

Image file

DNA level

29.Any other information (Apomixis; Inversion; Male sterility;Pollen grain mitosis; Pollen stainability;Translocations etc):

Pollen stainability(%): 99.7^{40},95.88^{37}