

Species Datasheet

Datasheet No. A-098.001.019
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Cyperus esculentus* L.

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Chlorocyperus aureus* (K.Richt.) Palla ex Kneuck. *C. phymatodes* (Muhl.) Palla, *Cyperus aureus* Ten., *C. aureus* subsp. *esculentus* (L.) Nyman, *C. bahiensis* Steud., *C. buchananii* Boeckeler, *C. bulamensis* Steud., *C. callistus* Ridl., *C. chrysostachys* Boeckeler, *C. damiattensis* A.Dietr., *C. esculentus* f. *angustispicatus* (Britton) Fernald, *C. esculentus* f. *evolutus* C.B. Clarke, *C. esculentus* f. *macrostachyus* (Boeckeler) Fernald, *C. esculentus* f. *princeps* C.B. Clarke, *C. esculentus* subsp. *aureus* K.Richt., *C. esculentus* var. *cyclolepis* Boeckeler ex Kük., *C. esculentus* var. *heermannii* (Buckley) Britton, *C. esculentus* var. *helodes* (Schrad. ex Nees) C.B. Clarke, *C. esculentus* var. *leptostachyus* Boeckeler, *C. esculentus* var. *lutescens* (Torr. & Hook.) Kük. ex Osten, *C. esculentus* var. *phymatodes* (Muhl.) Kük., *C. esculentus* var. *sativus* Boeckeler, *C. esculentus* var. *sprucei* C.B. Clarke, *C. fulvescens* Liebm., *C. gracilescens* Schult., *C. gracilis* Link, *C. heermannii* Buckley, *C. helodes* Schrad. ex Nees, *C. hydra* Kunth, *C. lutescens* Torr. & Hook., *C. melanorhizus* Delile, *C. nervosus* Bertol., *C. officinalis* T.Nees, *C. pallidus* Savi, *C. phymatodes* Muhl., *C. phymatodes* var. *heermannii* (Buckley) S. Watson, *C. repens* Elliott, *C. ruficomus* Buckley, *C. sieberianus* Link, *C. tenoreanus* Schult. & Schult. f., *C. tenorei* C. Presl, *C. tuberosus* Pursh, *C. variabilis* Salzm. ex Steud., *Pterocyperus esculentus* (L.) Opiz, *P. esculentus* (L.) Hayek

2. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperm
- Clade: Monocots
- Clade: Commelinids
- Order: Poales Small
- Family: Cyperaceae Juss.
- Genus: *Cyperus* L.
- Species: *C. esculentus* L.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Glumaceae
Ordo: Cyperaceae Juss.
Genus: *Cyperus* L.
Species: *C. esculentus* L.

3. Distribution:

Global: America and India

India: Peninsular India

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

5. Threat Status:

IUCN

BSI

6. Habit and Habitat: Herb. Weed in cultivated and waste places.

8. Life Form: Rhizomatous geophyte

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value Methodology:

2C: 1.2pg⁴⁹; 4C: 2.4pg⁴⁹

Feulgen Microdensitometry⁴⁹

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n=18^{33}48^{34}108^{35,36}208^{9,11}$

14. Gametic chromosome number(s): $n=54^{8,23}104^{9,19}$

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

Image file

16. Ploidy level:

Image file

17. Agametoploidy:

18. Nature of polyploidy (auto, segmental, allo, autoallo):

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):

21. Somatic chromosomes:

Karyotype:

Chromosome size:

NOR chromosome(s):

Degree of asymmetry:

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: 104II^{11,31}

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; Translocation etc):