

Species Datasheet

Datasheet No. A-403.054.001
(family.genus.species)

DBT-1

1. Taxon:

Species: *Tithonia diversifolia* (Hemsl.) A. Gray
Subspecies
Variety
Cultivar
Hybrid
Image file

2. **Synonyms:** *Helianthus quinquelobus* Sesse & Moc., *Mirasolia diversifolia* Hemsl., *Tithonia diversifolia* subsp. *diversifolia*, *T. diversifolia* var. *diversifolia*, *T. diversifolia* var. *glabriuscula* S.F. Blake, *Urbanisolia tagetiflora* var. *diversifolia* (Hemsl.) Kuntze, *U. tagetiflora* var. *flavus* Kuntze, *U. tagetiflora* f. *grandiflorus* Kuntze, *U. tagetifolius* f. *grandiflorus* Kuntze

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Superasterids
- Clade: Asterids
- Order: Asterales Link
- Family: Asteraceae Bercht. & J. Presl
- Genus: *Tithonia* Desf. ex Juss.
- Species: *T. diversifolia* (Hemsl.) A. Gray

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Dicotyledons
Subclass: Gamopetalae
Series: Inferae
Cohors: Asterales Link
Ordo: Compositae Giseke
Genus: *Tithonia* Desf. ex
Juss. Species: *T. diversifolia* (Hemsl.)
A. Gray

4. Distribution:

Global: Australia, Belize, Brazil, Caribbean, China, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Honduras, India, Mexico, Nicaragua, Panama, South Africa, USA

India: Karnataka, Kerala, Maharashtra, Meghalaya, Uttar Pradesh, Tamil Nadu

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

6. Threat Status:

IUCN:

BSI:

7. **Habit and Habitat:** Shrub or undershrub. Common in ravine slopes, riverbanks and marshy wastelands etc.

8. **Life Form:** Chamaephytes

9. **Economic Importance:**

10. **Probable Progenitor of:**

11. DNA

C-value

Methodology

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n = 30^{1,2}$, $2n = 34^{3-7}$

14. Gametic chromosome number(s): $n = 17^{8-13}$

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, aneusomaty, polysomaty):

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 17II^{13}

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level^{14,15}

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