

Species Datasheet

Datasheet No. A-403.032.001
(family.genus.species)

DBT-1

1.Taxon:

Species: *Guizotia abyssinica* (L.f.) Cass.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. **Synonyms:** *Anthemismysorensis* herb. madr. ex DC., *Bidens ramtilla* Wall. ex DC., *Buphthalmum ramtilla* Buch.-Ham. ex Wall., *Guizotia abyssinica* var. *abyssinica*, *G. abyssinica* var. *angustior* (DC.) Oliv. & Hiern, *G. abyssinica* var. *baldratiana* Cif., *G. abyssinica* var. *baldratiana* Cufod., *G. abyssinica* var. *candussoiana* Cif., *G. abyssinica* var. *caulirufa* Cif., *G. abyssinica* var. *corgevinii* Cif., *G. abyssinica* var. *negriana* Cif., *G. abyssinica* var. *pichisermollii* Cif., *G. abyssinica* var. *sativa* (Roxb. ex Sims) Oliv. & Hiern, *G. abyssinica* var. *sciarapovii* Cif., *G. oleifera* (DC.) DC., *G. oleifera* DC. & A.DC., *G. oleifera* subsp. *angustior* DC., *G. oleifera* subsp. *oleifera*, *G. oleifera* var. *oleifera*, *G. oleifera* var. *sativa* (Roxb. ex Sims) DC., *G. oleifera* subsp. *sativa* DC., *Jaegeria abyssinica* (L.f.) Spreng., *Polymnia abyssinica* L.f., *Ramtilla oleifera* DC., *R. oleifera* var. *oleifera*, *R. oleifera* var. *sativa* (Roxb. ex Sims) DC., *Tetragonotheca abyssinica* Ledeb., *Verbesina sativa* Roxb. ex Sims, *V. sativa* Roxb.

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: *Guizotia* Cass.
- Species: *G. abyssinica* (L.f.) Cass.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Dicotyledons
Subclass: Gamopetalae
Series: Inferae
Cohors: Asterales Link
Ordo: Compositae Giseke
Genus: *Guizotia* Cass.
Species: *G. abyssinica* (L.f.) Cass.

4. Distribution:

Global: Australia, Asia, China, Costa Rica, Ethiopia, India, New Zealand, South Africa, USA

India: Andhra Pradesh, Bihar, Maharashtra, Orissa, Sikkim, Uttar Pradesh, West Bengal

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

6. Threat Status:

IUCN:

BSI:

7. **Habit and Habitat:** Herb

8. **Life Form:** Chamaephytes

9. **Economic Importance:** Oil seed crop, Green manure

10. **Probable Progenitor of:**

11. **DNA**

C-value

Methodology

2C (7.57 pg)¹⁷

Microdensitometer

12. **Basic chromosome number(s):** x=15¹⁷

13. Zygotic chromosome number(s): $2n=30$ ^{1-9,17,18}, $2n=10, 21, 30, 60$ ¹⁹

14. Gametic chromosome number(s): $n=15$ ^{6,7,10,18}

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

Image file

16. Ploidy level: Diploid^{1-9,17,18}

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:^{1,9}

Karyotype Majority metacentric chromosomes

Chromosome size

NOR chromosome(s)⁸

Degree of asymmetry Symmetrical

Image file

22. Banding pattern(s): C-banding⁹

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: 15II^{3,18}

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level¹

Image file

DNA level¹¹⁻¹⁶

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis;

Pollen stainability;Translocationsetc.):