

Final Species Datasheet JamU+CalU+SUK-Phase I

Datasheet No. A-253.003.002
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Shorea robusta* C.F.Gaertn.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Dryobalanops robusta* (C.F.Gaertn.) Oken, *Vatica robusta* (C.F.Gaertn.) Steud.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicot
- Clade: Rosids
- Clade: Malvids
- Order: Malvales
- Family: Dipterocarpaceae Blume
- Genus: *Shorea* Roxb. ex C.F.Gaertn.
- Species: *S. robusta* C.F.Gaertn.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Polypetalae
- Series: Thalamiflorae
- Cohors: Guttiferales
- Ordo: Dipterocarpaceae Blume
- Genus: *Shorea* Roxb. ex C.F.Gaertn.
- Species: *S. robusta* C.F.Gaertn.

4. Distribution:

Global: Bangladesh, Bhutan, India, Nepal

India: Tropical Himalayas to Southern Eastern Ghats

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

6. Threat Status:

IUCN: Least Concern

BSI:

7. Habit and Habitat: Tree, deciduous dry and moist forests and in evergreen moist forest

8. Life Form: Phanerophyte

9. Economic Importance: Used for timber. The tannin obtained from the leaves, bark and wood is used for tanning certain qualities of leather, paper, cellulose, etc. The fatty oil from the seeds (Sal butter) is used for cooking and lighting purposes. The tree is one of the primary hosts for 'tasar' silk worm

10. Probable Progenitor of:

11. DNA

C-value

Methodology

2C (1.15±0.006 pg)⁴

Feulgen microdensitometry⁴

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): 2n=14^{5,6}

14. Gametic chromosome number(s): n=7^{4,7,8,9,10}

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 1.4-2.8 μm^5

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

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level^{11,12,13}

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