

# Final Species Datasheet JamU+CalU+SUK-Phase I

Datasheet No. A-240.001.012  
(family.genus.species)

DBT- Network Programme

## 1. Taxon:

Species: *Acer saccharum* Marshall

Subspecies

Variety

Cultivar

Hybrid

Image file

**2. Synonyms:** *Acer barbatum* f. *commune* Ashe, *A. hispidum* Schwer., *A. nigrum* var. *glaucum* (Schmidt) Fosberg, *A. palmifolium* Borkh., *A. palmifolium* f. *euconcolor* Schwer., *A. palmifolium* f. *glabratum* Schwer., *A. palmifolium* f. *glaucum* (Pax) Schwer., *A. palmifolium* f. *integrilobum* Schwer., *A. palmifolium* var. *concolor* Schwer., *A. palmifolium* var. *glaucum* Sarg., *A. saccharinum* var. *glaucum* Pax, *A. saccharinum* var. *viride* Schmidt, *A. saccharophorum* K. Koch, *A. saccharophorum* f. *angustilobatum* Vict. & J. Rousseau, *A. saccharophorum* f. *conicum* (Fernald) J. Rousseau, *A. saccharophorum* f. *glaucum* (Schmidt) J. Rousseau, *A. saccharophorum* var. *rugelii* (Pax) J. Rousseau, *A. saccharophorum* var. *subvestitum* Vict. & Roll.-Germ., *A. saccharum* f. *angustilobatum* (Vict. & J. Rousseau) A. E. Murray, *A. saccharum* f. *conicum* Fernald, *A. saccharum* f. *euconcolor* Pax, *A. saccharum* f. *glabratum* Pax, *A. saccharum* f. *glaucum* (Schmidt) Pax, *A. saccharum* f. *hispidum* (Schwer.) A. E. Murray, *A. saccharum* f. *integrilobum* Pax, *A. saccharum* f. *pubescens* Pax, *A. saccharum* f. *rubrocarpum* A. E. Murray, *A. saccharum* f. *saccharum*, *A. saccharum* f. *subvestitum* (Vict. & Roll.-Germ.) A. E. Murray, *A. saccharum* f. *truncatum* Pax, *A. saccharum* f. *villipes* (Rehder) A. E. Murray, *A. saccharum* f. *villosum* Pax, *A. saccharum* subsp. *Saccharum*, *A. saccharum* var. *glaucum* (Schmidt) Sarg., *A. saccharum* var. *glaucum* Pax, *A. saccharum* var. *quinquelobulatum* A. E. Murray, *A. saccharum* var. *saccharum*, *A. saccharum* var. *viride* (Schmidt) A. E. Murray, *A. subglaucum* Bush, *A. subglaucum* var. *sinuosum* Bush, *A. treleaseanum* Bush

## 3. Systematic Position:

### APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Superrosids
- Clade: Rosids
- Order: Sapindales Juss. Ex Bercht. & J. Presl
- Family: Sapindaceae Juss.
- Genus: *Acer* L.
- Species: *A. saccharum* Marshall

### Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Polypetalae
- Series: Disciflorae
- Cohors: Sapindales Juss. Ex Bercht. & J. Presl
- Ordo: Sapindaceae Juss.
- Genus: *Acer* L.
- Species: *A. saccharum* Marshall

## 4. Distribution:

**Global:** USA, Canada

**India:**

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

## 6. Threat Status:

**IUCN:** Least concern

**BSI:**

## 7. Habit and Habitat: Tree; moist bottomlands and wooded slopes

## 8. Life Form: Phanerophytes

**9. Economic Importance:** It is used for cabinets, furniture, and interior finishing. Maple syrup is made from the sap and wildlife consumes the fruits/seeds. Sugar maple is also widely planted as an ornamental. Its leaves turn vivid shades of yellow and red in the fall.

## 10. Probable Progenitor of:

**11. DNA**

**C-value**

2C (1.84 ± 0.09 pg)<sup>1</sup>

**Methodology**

Flow cytometry<sup>1</sup>

**12. Basic chromosome number(s):**

**13. Zygotic chromosome number(s):**  $2n=26^{13}$

**14. Gametic chromosome number(s):**

**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**

Image file

**27. Chromosome distribution at anaphase I:**

**28. Genetic diversity:**

**Chromosomal level**

Image file

**DNA level<sup>14</sup>**

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

