

# Species Datasheet

Datasheet No. A-140.002.001  
(family.genus.species)

DBT- Network Programme

## 1. Taxon:

Species: *Vigna aconitifolia* (Jacq.) Marechal

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file:

2. **Synonyms:** *Dolichos dissectus* Lam., *Phaseolus aconitifolius* Jacq., *P. palmatus* Forssk.,  
*Vigna aconitifolius* (Jacq.) Marechal

## 3. Systematic Position:

### APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Rosids
- Order: Fabales
- Family: Fabaceae Lindl.
- Subfamily: Faboideae Rudd
- Genus: *Vigna* Savi
- Species: *V. aconitifolia* (Jacq.) Marechal

### Bentham and Hooker (1862)

Kingdom: Plantae  
Division: Phanerogamia  
Class: Dicotyledons  
Subclass: Polypetalae  
Series: Calyciflorae  
Cohors: Rosales Bercht. & J. Presl  
Ordo: Leguminosae Juss.  
Subordo: Papilionaceae Giseke  
Genus: *Vigna* Savi  
Species: *V. aconitifolia* (Jacq.) Marechal

## 4. Distribution:

**Global:** America, Australia, Pakistan, Sri Lanka

**India:** Andhra Pradesh, Bihar, Karnataka, Maharashtra, Punjab, Rajasthan, Uttarakhand, Uttar Pradesh

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

## 6. Threat Status:

IUCN:

BSI:

7. **Habit and Habitat:** Prostrate creeping herb; Grown on wide range of soil types, the crop has very high level of drought resistance and general hardiness. It grows best under high constant temperatures.

8. **Life Form:** Therophytes

**9. Economic Importance:**Pulse crop, Forage, Cover crop, Food

**10. Probable Progenitor of:**

**11. DNA**

**C-value**

**Methodology**

**12. Basic chromosome number(s):** $x=11^{1,2}$

**13. Zygotic chromosome number(s):** $2n=22^{1,2,3,4,5,6}$

**14. Gametic chromosome number(s):** $n=11^4$

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

Image file

**16. Ploidy level:**Diploid<sup>1,2,3,4,5,6</sup>

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:**<sup>1,2,3,6</sup>

**Karyotype** Metacentric/Submetacentricchromosomes

**Chromosome size**Small

**NOR chromosome(s)**2

**Degree of asymmetry**Symmetrical

Image file

**22. Banding pattern(s):**CMA/DAPI banding<sup>5</sup>

Image file

**23. Physical mapping of chromosomes:**

**In situ hybridization**

Image file

**Fluorescent in situ hybridization:** 18S - 5.8S - 26S and 5S ribosomal gene families<sup>6</sup>

Image file

**24. Genomic in situ hybridization:**<sup>6</sup>

Image file

**25. Linkage map:**

Image file

**26. Chromosome associations:**

**Female meiosis**

**Male meiosis** 1111<sup>4</sup>

Image file

**27. Chromosome distribution at anaphase I:** 11:11<sup>4</sup>

**28. Genetic diversity:**

**Chromosomal level**<sup>3</sup>

**DNA level**<sup>7,8,9,10</sup>

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

**Pollen stainability; Translocations etc.):** Pollen stainability: 82-99%<sup>4</sup>