

# Cleome gynandra

*Cleome gynandra* (Sanskrit: Ajagandha, अजगन्धा; Marathi:Tilavan, तलिवन; Kenyan (Kisii):Chinsaga;(Luo):Dek, is a species of *Cleome* known by the common name **Shona cabbage** or **African cabbage**. It is an annual wildflower native to Africa but has become widespread in many tropical and sub-tropical parts of the world. It is an erect, branching plant generally between 25 cm and 60 cm tall. Its sparse leaves are each made up of 3-5 oval-shaped leaflets. The flowers are white to rose pink. The seed is a brown 1.5mm diameter sphere. The leaves are edible.

## 1 Uses

The leaves form an important part of diets in Southern Africa, and nutritional analysis has found it to be high in certain nutrients including amino acids, vitamins and minerals.<sup>[2]</sup> In Telugu, *C. gynandra* is termed as Vaminta or Vayinta. In India, many tribes cook the leaves of this herb like any other leaf curry.

## 2 Ecology

*Cleome gynandra* is considered an invasive weed in many places in the U.S.<sup>[3]</sup> and elsewhere in the Pacific.<sup>[4]</sup>

## 3 Biochemistry

*Cleome gynandra* uses NAD-malic enzyme type C4 photosynthesis and has the characteristic traits associated with this including changes in "leaf biochemistry, cell biology and development".<sup>[5]</sup> *Cleome gynandra* is closely related to *Arabidopsis thaliana* (a C3 photosynthetic plant) and therefore offers comparison with this well studied model plant.

## 4 References

- [1] "The Plant List: A Working List of All Plant Species". Retrieved January 26, 2014.
- [2] *Cleome gynandra* L. entry in Plantzafrica database
- [3] USDA-NRCS: Invasive and noxious weeds

[4] *Cleome gynandra*: Plant threats to Pacific ecosystems (Pacific Island Ecosystems at Risk project (PIER))

[5] Marshall, D.M., Muhaidat, R., Brown, N.J., Liu, Z., Stanley, S., Griffiths, H.G., Sage, R.F., Hibberd, J.M. (2007) *Cleome*, a genus closely related to *Arabidopsis*, contains species spanning a developmental progression from C3 to C4 photosynthesis. *Plant Journal*, 51: 886-896

## 5 External links

- Crops for the Future: African cabbage (*Cleome gynandra*)
- *Cleome gynandra* in West African plants – A Photo Guide.

## 6 Text and image sources, contributors, and licenses

### 6.1 Text

- **Cleome gynandra** *Source:* <http://en.wikipedia.org/wiki/Cleome%20gynandra?oldid=634528132> *Contributors:* Hesperian, Woohookitty, IceCreamAntisocial, Wknight94, Rkitko, Philiptdotcom, Marco Schmidt, Nick Number, Smartse, Colchicum, Rwessel, MystBot, Ad-dbot, Yobot, AnomieBOT, J04n, Redaloes, Dr CyCoe, EmausBot, Donner60, Psubhashish, Plantdrew, BG19bot, MKwek, Sminthopsis84, Salladb and Anonymous: 9

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