exerted. Ovary subglobose, papillose, 3-celled. Capsules 3-valved; epicarp scabrous.

Fl. & Fr.: August-December.

Exsiccata: MPB-21110.

**Distribution**: Common weed in groundnut and sweet potato fields. Kargaon in Satara district; Karve, Chandgad in Kolhapur district.

**Note**: It is a native of Tropical America. Earlier in India, it was known from Karnataka and Tamil Nadu.

4. *Rotala occultiflora* Koehne, Bot. Jahrb. 1: 152. 1880; Blatt. & Hallb. *J. Bombay Nat. Hist. Soc.* 25: 705. 1918; Sharma *et al.* Fl. Karnataka 108. 1984; Joseph & Sivaranjan Pl. Sci. 99 (3): 191. t. 5. 1989. (Lythraceae).

Small herb; stem creeping and rooting below; branches erect, 4-6 cm tall. Leaves in whorls of 3, obspathulate, plicate; base dialated, enclosing the flowers, 0.6-0.9 cm long. Flowers shortly pedicillate, solitary in the axils of bractiform leaves. Calyx tube translucent, 1 mm long; lobes 4, triangular. Petals absent. Stamens 2, inserted near the base of calyx tube. Ovary ellipsoidal; style short, persistent; stigma capitate. Capsule ellipsoidal, 3-valved. Seeds semiellipsoidal.

Fl. & Fr.: August-October. Exsiccata: MPB-21242.

**Distribution**: Rare in wet places. Kaas in Satara district.

**Note**: An inconspicuous, ephemeral species. Earlier it was known from Karnataka and Tamil Nadu.

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# 20. CLITORIA ANNUA GRAHAM VAR. EMARGINATA (VAR. NOV.): A NEW VARIETY OF SPECIES CLITORIA ANNUA GRAHAM (FAMILY: FABACEAE) FROM MAHARASHTRA, INDIA

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During a floristic survey of flowering plants in Sawarna taluka, Nashik district, Maharashtra, in November 2009, we came across an interesting plant of the genus *Clitoria* in open grassland near the Sawarna river. A few plants from the area were collected, processed and preserved. Comparison with the material deposited at Blatter Herbarium (BLAT) and literature at the BLAT library (Almeida 1990, 1998, 2005; Cooke 1902; Hooker 1876) confirmed it as a new variety of *Clitoria annua* Graham, Family Fabaceae, and was named *Clitoria annua* Graham var. *emarginata* (var. nov.)

*Clitoria* [L., Gen. ed. 1, 344, 1737]; L., Sp.Pl. 753, 1753; Benth. & Hook. f., Gen. Pl. 1: 527, 1865 (Fabaceae, 1753). Clitoris = an anatomical term in Zoology. Lectotype: *C. ternatea* L. (vide Britton *et* Brown, Ill. Fl. United States and Canada 2: 416, 1913. Type: *C. ternatea* L. spp.: 40 (Sant. & Henry), 70 (Mabb.), Trop. America – 3 in India. *C. ternatea* L., "Aparajita, Shankhapushpi, Butterfly pea" (Trop. America) – Now pantropic in cultivation. *C. annua* Graham, endemic to Mumbai. Found in two varieties, typical one (*C. annua* var. *annua*) and *C. annua* var. *sekharii* Almeida & Chaturvedi, both endemic to Mumbai.

Present variety is the second variety, beside the typical one.

*Clitoria annua* Graham, Cat. Bombay Pl. 47, 1839; Almeida & Almeida in *J. Bombay Nat. Hist. Soc.* 84: 719-722, 1986; Almeida, Fl. Maharashtra Vol. 2: 29, 1998.

Herbaceous, erect, 40-50 cm high; stem angular, with hairs. Leaves imparipinnate; petioles 9-12 mm long, hairy; stipules 3 mm long, subulate. Leaflets 5, membranous (terminal the largest and lowest pair of lateral leaflets smaller than the rest) 5-8 x 1-4 cm, variable in shape, broadly elliptic-oblong, subobtuse to lanceolate, acute, sparingly strigose above, more densely beneath; petiolules 2 mm long; stipules filiform. Flowers in axillary 2-flowered racemes; peduncles and pedicels very short; bracts linear-lanceolate, subulate; bracteoles 6-8 mm long, ovate or lanceolate, aristate. Calyx tubular, 1-2 cm long, hairy, nerved; teeth shorter than tube, lanceolate, aristate. Corolla 2.5 cm long, blue. Pods 25-50, 6 mm flat reticulately veined, pubescent. Seeds 5-6, turn black after dry.

Fl.: August-October.

Distribution: H. Santapau- 16540 collected from Sasan

high hill on 2.x.1953 and deposited in the Blatter Herbarium-16226 (BLAT).

*Clitoria annua* Graham var. *sekharii* Almeida & Chaturvedi, Fl. Maharashtra Vol. 2: 29, 1998.

This variety differs from the typical variety in having leaves with somewhat acuminate apices. In all other characters it resembles the typical variety.

Fl.: September-October.

**Distribution**: D.P. Panthaki- 2370, collected from Dang, on 24.x.1955 and deposited in the Blatter Herbarium - 16203. (BLAT).

Clitoria annua Graham var. emarginata (var. nov.)

This variety differs from the typical variety in having leaves with emarginate apices in the leaflets.

**Holotype**: Santosh Yadav & M.R. Almeida 1034, collected from Sawarna, Nashik district, on 5.xi.2009, deposited in the Blatter Herbarium (BLAT).

**Isotype**: Santosh Yadav & M.R. Almeida 1035, collected from Sawarna, Nashik district, on 5.xi.2009, deposited in the Herbarium of Magdelin Almeida Environmental Centre (MAEC), Savantwadi.

Herbaceous, erect, 30-60 cm high; stem cylindrical with ridges, hairy. Leaves imparipinnate; petioles 5-9 mm long, hairy: stipules 2-3 mm long, subulate. Leaflets 3 or 5, membranous (the terminal the largest and lowest pair of lateral leaflets smaller than the rest) 2-4 x 1.5-3.0 cm, variable in shape, broadly linear-oblong, apex emarginate, sparingly strigose above, more densely so beneath; petiolules 0.5 mm long; stipules filiform. Flowers in axillary 2-flowered racemes; peduncles and pedicels very short; bracts linear-lanceolate, aristate. Calyx tubular, 1-2 cm long, hairy, nerved; teeth shorter than the tube, lanceolate, aristate. Corolla 1.0-1.5 cm long, white. Pods 20-35 mm x 4-5 mm, flat, reticulately veined, pubescent. Seeds 3-5, 6 x 4 mm, black in colour, smooth surface.

Fl.: September-November.

Distribution: Sawarna in Nashik district.

**Distinguishing character (in Latin)** 

Is varietas distinctus ex typical varietas in having coma per emarginated apices in leaflets.

The following species of genus *Clitoria* in literature are published without proper description and are presently treated as *nomina nuda*.

1. Clitoria vaupelli Graham, Cat. Bombay Pl. 47, 1839.

Description given under this species is too short to match with any species of *Clitoria* L.

2. Clitoria brasiliana L., Sp. Pl. 753, 1753; Graham,

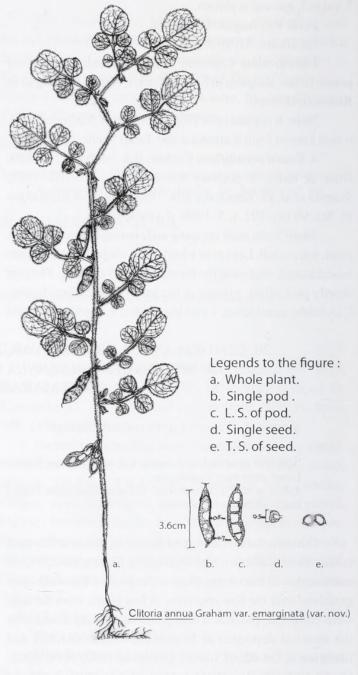


Fig. 1: Clitoria annua Graham var. emarginata (var. nov.)

Cat. Bombay Pl. 47, 1839.

The correct name for this species is *Centrosema* brasilianum (L.) Benth., Comm. Leg. Gen. 54, 1837.

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### MISCELLANEOUS NOTES

#### REFERENCES

ALMEIDA, S.M. (1990): Flora of Savantwadi, Vol. 1. Pp. 121. Scientific Publisher, Jodhpur.

ALMEIDA, M.R. (1998): Flora of Maharashtra, Vol. 2. Pp. 29. Orient Press, Mumbai.

ALMEIDA, M.R. (2005): Dictionary of Generic names of Flowering Plants and Ferns found in Maharashtra and Adjoining area, Orient Press, Mumbai. Pp. 75.

COOKE, T. (1902): Flora of Presidency of Bombay, Vol. 1. Pp. 405-406. London (Reprinted vols. I-III, 1958).

HCOKER, J.D. (1876): The Flora of British India, Vol. 2. Pp. 208. Published by L. Reeve, London.

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