

**A NEW SPECIES OF BRACHYSTELMA R. Br.  
(ASCLEPIADACEAE) FROM INDIA**

*Brachystelma elenaduensis* M. B. S. Char, Sp. nov.

AFFINIS *B. edulis* Collett and Hemsley, sed corollae lobis brevioribus, coronae corollis obtuse pentangulare scaphiformibus, squamis coronae staminalis ad basin isobilaterale triangulare appendiculatis differt. Typus: India Char 1 (holotypus, CAL; isotypi, K).

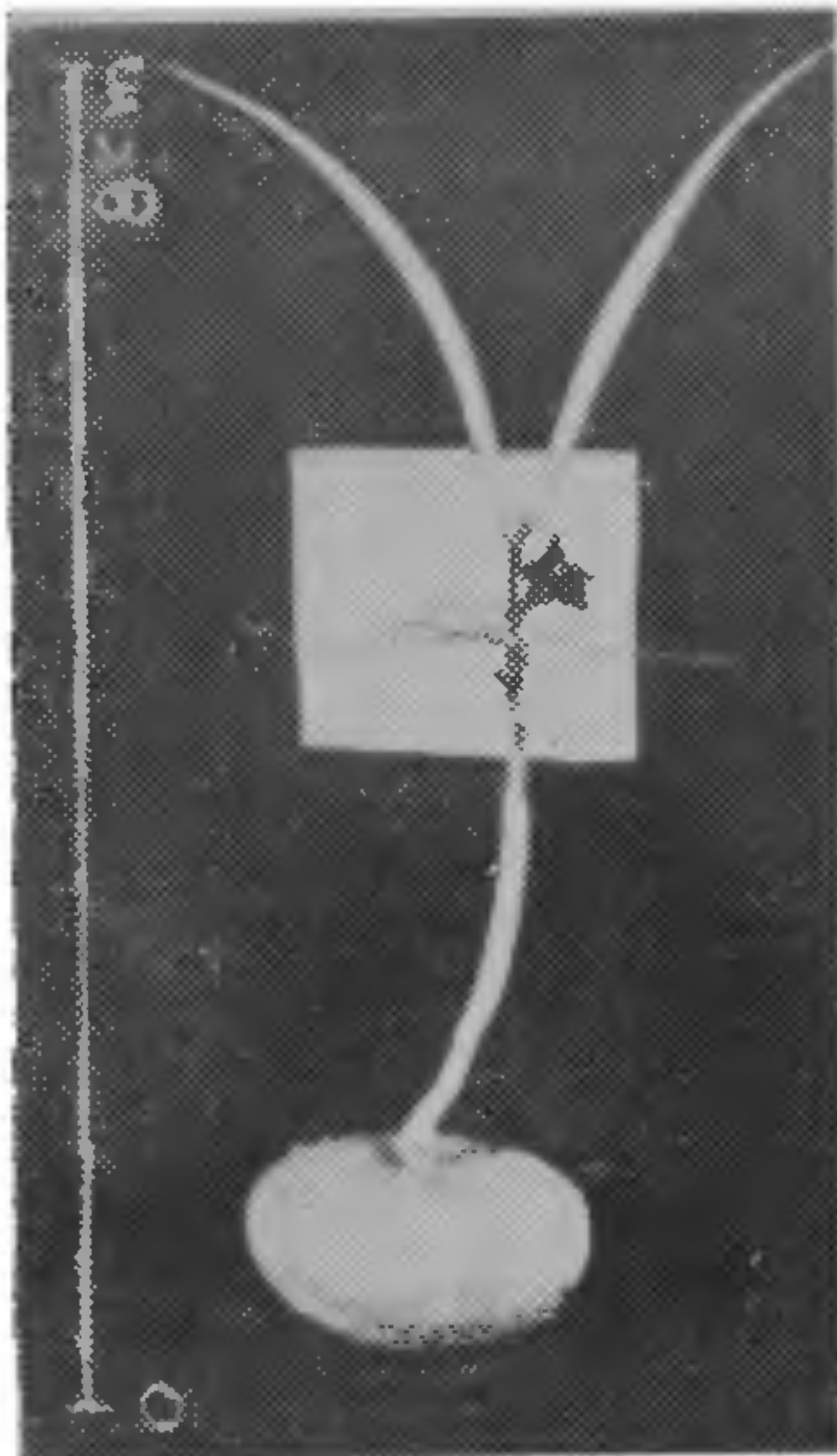


FIG. A

Affinity to *B. edulis* Collett and Hemsley, but differing from it in the short tip of the corolla lobe, obtusely pentangular cup of the corolline corona, flat scale apices of the staminal corona and scale bases with isobilateral triangular processes.

Perennial. Rhizome tuber-like, globose or ovoid, 1.5-4 × 2-3 cm. Stem 5-10 cm tall, erect, branched or unbranched, slender, puberulous, internodes ca. 1 mm long. Leaves 1-4 cm × 2-4 mm, fleshy, linear, ciliate, narrowly acute. Flowers 1-4 usually solitary, 4-8-mm long, axillary, pedicel slender, all parts puberulous. Calyx 5-lobed, lobes 2-4 mm long, narrowly acute. Corolla rotate, purple, deeply 5-lobed, lobes 4-6 mm long, adaxial surface glabrous, spreading and reflexed at bloom, lanceolate, acute but appearing obtuse due to the tip bending back. Corolline corona cupular, 1-2 × 2-3 mm, obtusely 5-angled around the staminal corona and as high, undulate, purplish and with white hairs outside; teeth 5, subulate, each adnate to the base of corresponding staminal coronal

scale. Staminal corona cream-coloured, columnar, with 5 scales at the upper half; scales laterally biconcave with marginal and median ridges, apices flat, converging and meeting around the stigma in a pentangular form, basal process isobilaterally triangular. Follicles 2, rarely 1 per flower, 4-8 cm long, slender. Seeds 8 mm-1 cm × 3-5 mm, compressed, with an apical tuft of hairs, 2-3 cm long.

India, Karnataka State, Tumkur District, Elenadu (Altitude: of the village bench mark, 780-33 m; of the contour, 800 m). Sandy grass land. 2 April 1969, M. B. S. Char 1 (Holotype-CAL). M. B. S. Char 3, in fruit.

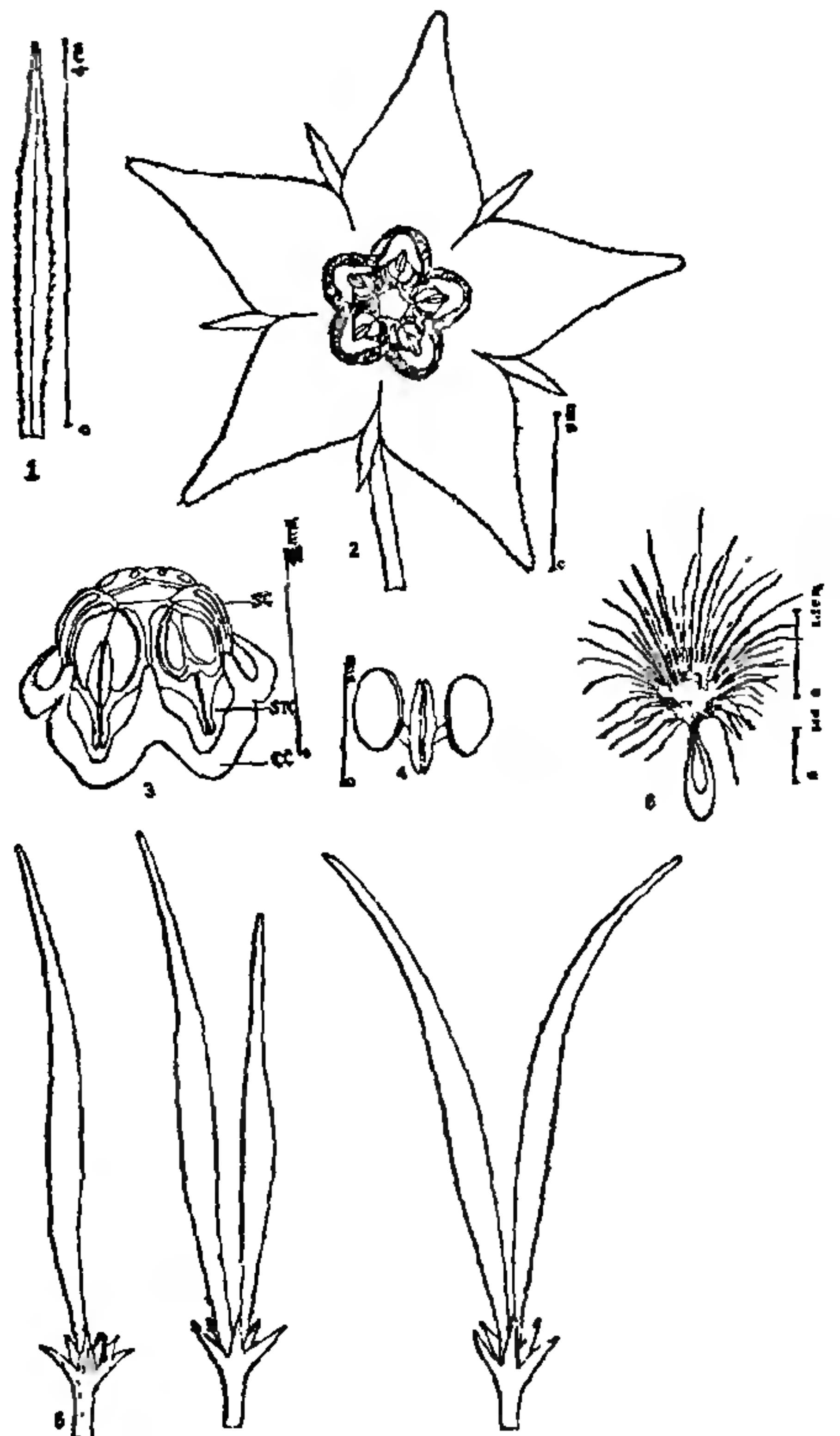


FIG. B 1-6. Fig. 1. Leaf with ciliate margin, Fig. 2. Flower, adaxial view; Fig. 3. Slant view of corona showing corolline corona (CC), staminal corona (STC) and scales (SC); Fig. 4. Pollinium; Fig. 5. Fruit showing one and a pair of follicles; Fig. 6. Seed with an apical tuft of hairs.

The new species closely resembles *B. edulis* Collett and Hemsley, which is known originally from upper Burma and Siam (Thailand) and is quite distinct in its

folial characters as already mentioned<sup>1</sup>. The habitat of both is, however, similar as they commonly grow in sandy grassland. It is likely to be missed in the field on account of its small size and growth amidst grasses. Its tuberous rhizome is used as an article of food by the local people who call it by the vernacular name in Kannada language as Ullika or Unneeka.

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1. Collett and Hemsley, W. B., "On a collection of plants from Upper Burma and the Shan States," *Bot. J. Linn. Soc.*, 1890, 28, 89 (pl. 14).

## TWO NEW SPECIES OF *CERCOSPORA*

Two new species of *Cercospora*, viz., *Cercospora jagdalpurensis* and *Cercospora caricapapayae* are being described here.

### (1) *Cercospora jagdalpurensis* spec. Nov.

The fungus causing die back involving whole leaf lamina. Diseased region olivaceous brown, dry, amphigenous, irregular.

Colony effuse, greyish brown, conidiophores fasciculate, multiseptate, olivaceous brown, unbranched, simple, straight or flexuous, with distinct scar of attachment to conidia,  $44-94 \times 4-6 \mu$ ; conidia hyaline, broader below and tapering above, straight or curved, 3-30 septate, base truncate, apex acute, acropleurogenous,  $48-315 \times 4-6 \mu$  (Fig. 1).

On the living leaves of *Lagerstroemia parviflora* Roxb. (Fam. Lythraceae), Jagdalpur (M.P.), India, November, 1977, Leg. R. C. Rajak.

Type specimen has been deposited in herb. IMI, Kew, No. 224100.

The present species differs from other *Cercospora* sp., viz., *C. paramignya* Thirumalachar and Chupp<sup>5</sup>, *C. lythracearum* Heald and Wolf<sup>4</sup> described on *Lagerstroemia parviflora* from India, in having long conidiophores showing distinct scar and very long, hyaline, upto 30 septate conidia. However, *C. lythracearum* belongs to *Pseudocercospora*<sup>2</sup>. It is, therefore, being described here as a new species, *C. jagdalpurensis* spec. Nov.

### *Cercospora jagdalpurensis* spec. Nov.

Maculae foliolae, amphigena, irregularia; Coloniae effusae, giseo-brunneae; conidiophora fasciculata, multiseptata, olivacea-brunnea, non ramous, simplicia, recta vel flexuosa, cicatrice eminente ad antice vel conidiis,  $44-94 \times 4-6 \mu$ ; conidiis hyalina, latus infrafastigiata sursum, 3-30 septata, acropleurogena,  $48-315 \times 4-6 \mu$  (Fig. 1).

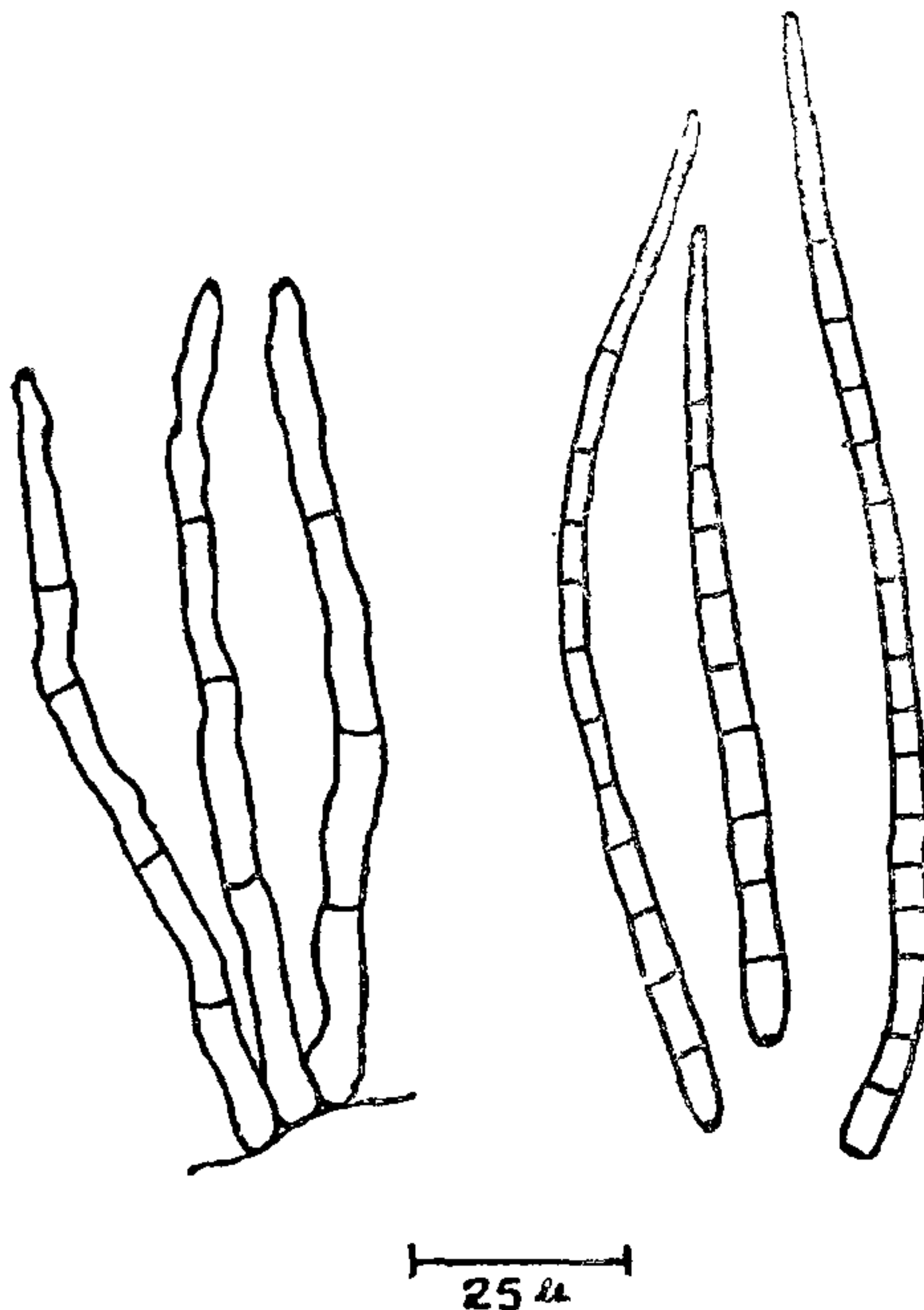


FIG. 1

In foliis viventibus *Lagerstroemia parviflora* Roxb. (Fam. Lythraceae), ad Jagdalpur (M.P.), India, November, 1977, Leg. R. C. Rajak.

Typus positus in herb. IMI, Kew, sub numero 224100.

### (2) *Cercospora caricapapayae* spec. Nov.

Colony effuse, greyish to dull white; stromata dark brownish black, composed of few brown cells; conidiophores fasciculate, in fascicles of 10-20, multiseptate, brown, lighter at apex, unbranched, simple, straight or flexuous, distinct scar is present at the apex of the conidiophores,  $95-210 \times 4-8 \mu$ ; conidia hyaline, broader below, tapering above, filiform, straight or curved, 9-30 separte, base subtruncate, apical end obtuse with distinct scar, acrogenous,  $80-330 \times 3-5-6 \mu$  (Fig. 2).