

OCCURRENCE OF *ALECTRA PARASITICA* A. RICH. IN INDIA A NEW VARIETY FROM BANDA DISTRICT, U.P.

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ABSTRACT

Alectra parasitica A. Rich., with a wide distribution in Eastern & North-Eastern Africa but hitherto not recorded from this country has now been collected in the Banda District of Uttar Pradesh. Since the Indian plant differs from the African specimens in the strongly rhizomatous development of the underground parts of the stem, it has been described as a new variety and is named *A. parasitica* A. Rich., var. *chitrakutensis* M. A. Rau, var. nov.

The genus *Alectra* of the Scrophulariaceae includes more than fifty species of parasitic herbs which are distributed in Africa, South America, Australia and India. While the majority of the species are found in tropical Africa, with some species common to Australia, two species are recorded from Brazil, one from Arabia and three from Madagascar. Two species are so far known from India viz., *A. indica* Benth. and *A. thomsonii* Hook. f. *A. thomsonii* has been previously collected in the South India, Madhya Pradesh and Bihar and recently it was reported from the Banda District of

Uttar Pradesh (Raizada 1958, Rau & Rao 1959). The specimens collected by the author and recorded in the above paper, however, on further examination revealed some differences and could not be satisfactorily compared with any of the existing specimens either at the Calcutta Herbarium or the Forest Research Institute Herbarium at Dehra Dun. Since the African species are not represented in the Indian Herbaria, the opinion of the authorities at Kew was sought and the specimens have now been kindly examined by them and identified as *A. parasitica* A. Rich., a species quite widely distributed in East and North-East Africa. Further they have reported that the Indian specimens can be distinguished from the African by the strongly rhizomatous development of the underground parts of the stem. Some African species show a tendency towards forming rhizomes but in none is it so marked. Accordingly they have suggested that the Indian plant may be recognised as a variety of *A. parasitica* A. Rich.

It, therefore, appears that this is the first record of the occurrence of this species in India. A detailed description of the new variety with Latin diagnosis as also a revised key for the species occurring in India are given in this paper.

Key to Indian Species *Alectra* Thunb. Nov. Gen. 81 (1784)

1. Leaves 1.25 to 4 cm., alternate or opposite, toothed: *A. indica*
2. Leaves reduced to scales, 0.25 to 0.6 cms.
 2. Flowers pedicelled, Filaments bearded: *A. thomsonii*
 2. Flowers sessile or nearly so. Filaments glabrous: *A. parasitica*

Alectra parasitica A. Rich. var. *chitrakutensis*
M. A. Rau, var. nov.

Proxima accedit ad *A. parasiticam* var. *parasiticam*, a qua tamen differt evolutione fortiter rhizomatica partium

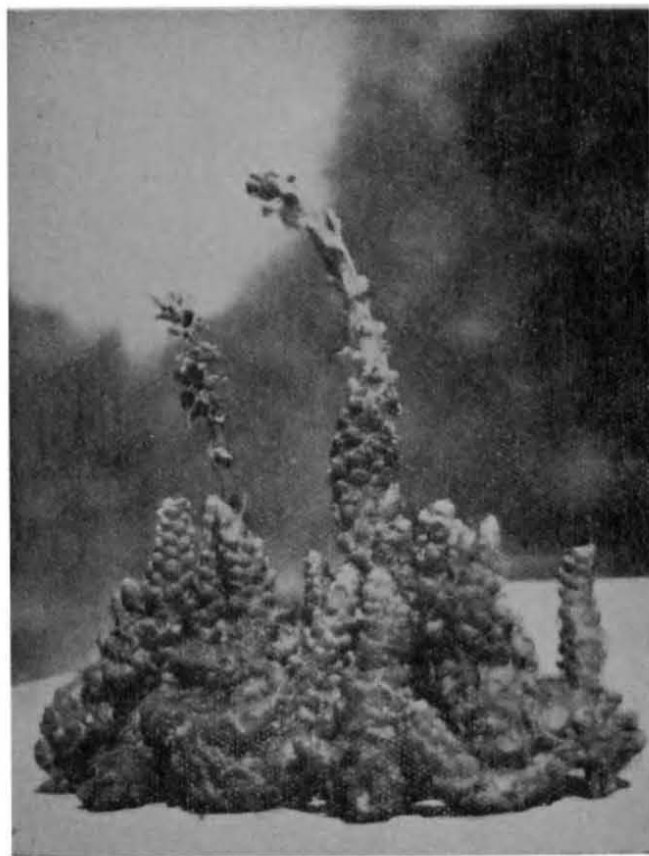


Fig. 1. *Alectra parasitica* A. Rich. var. *chitrakutensis* M. A. Rau, var. nov.
Photo showing rhizomes grouped together.

stirpis subterraneorum. Rhizoma perennans, pluribus gemmis axillaribus in axillis squamarum inter se valde proximarum. Typus, *M. A. Rau 3724*, lectus at Chitrakut in Banda Dist., in provincia U.P. in India a M. A. Rau die 13 novembris anni 1957 et positus in herbario regionis septentrionalis, Bot. Surv. Ind., ad Dehra Dun.

Very near to *A. parasitica*. Vegetatively it can be distinguished by the strongly rhizomatous development of the underground parts of the stem. Rhizome perennating with numerous axillary buds in the axils of closely set scale leaves.

A root parasite, changing black on drying. Stems rhizomatous, perennating, underground parts of stem strongly developed, 2-3 cms. thick, horizontally extending with numerous axillary buds in the axils of closely set scale leaves. Slender tubular haustorial structures coiled around rhizome. Rhizome orange-yellow in colour with a stale odour, easily broken. Shrinks considerably on drying and turns black.

Inflorescences terminal on the rhizome, flower bearing portion of erect axes 5 to 20 cms. long, angular, purplish in colour, hispid. Leaves very small, mostly scale-like, hispid, largest 0.6 cms. long, linear oblong, obtuse. Racemes rather loose. Floral leaves or bracts linear as long or longer than the sessile or almost sessile flowers. Bracteoles very slender as long as the calyx-tube in open flower, persistent. Calyx campanulate, hairy outside but glabrous within, lobes shorter than the tube, deltoid, acute. Corolla about 1 cm., glabrous, yellow

with purple streaks. Filaments short glabrous, anther cells slightly unequal, obtuse. Ovary globose, style long, inflexed. Capsule globose, 0.5 cm. diameter splitting into 4-valves. Seeds many, minute, cuneiform.

Habit: Under the shade of the shrubby *Vitex negundo* L. apparently parasitic on its roots.

Flowers & Fruits: September-November. Chitrakut in Banda District. Coll. No. M. A. Rau 3724. Nov. 13, 1957.

Holotype: Chitrakut, Banda District, U.P. India. November 13, 1957. M. A. Rau 3724, deposited in Northern Circle Herbarium, Botanical Survey of India, Dehra Dun, under Accession No. 2739.

So far known only from Banda District.

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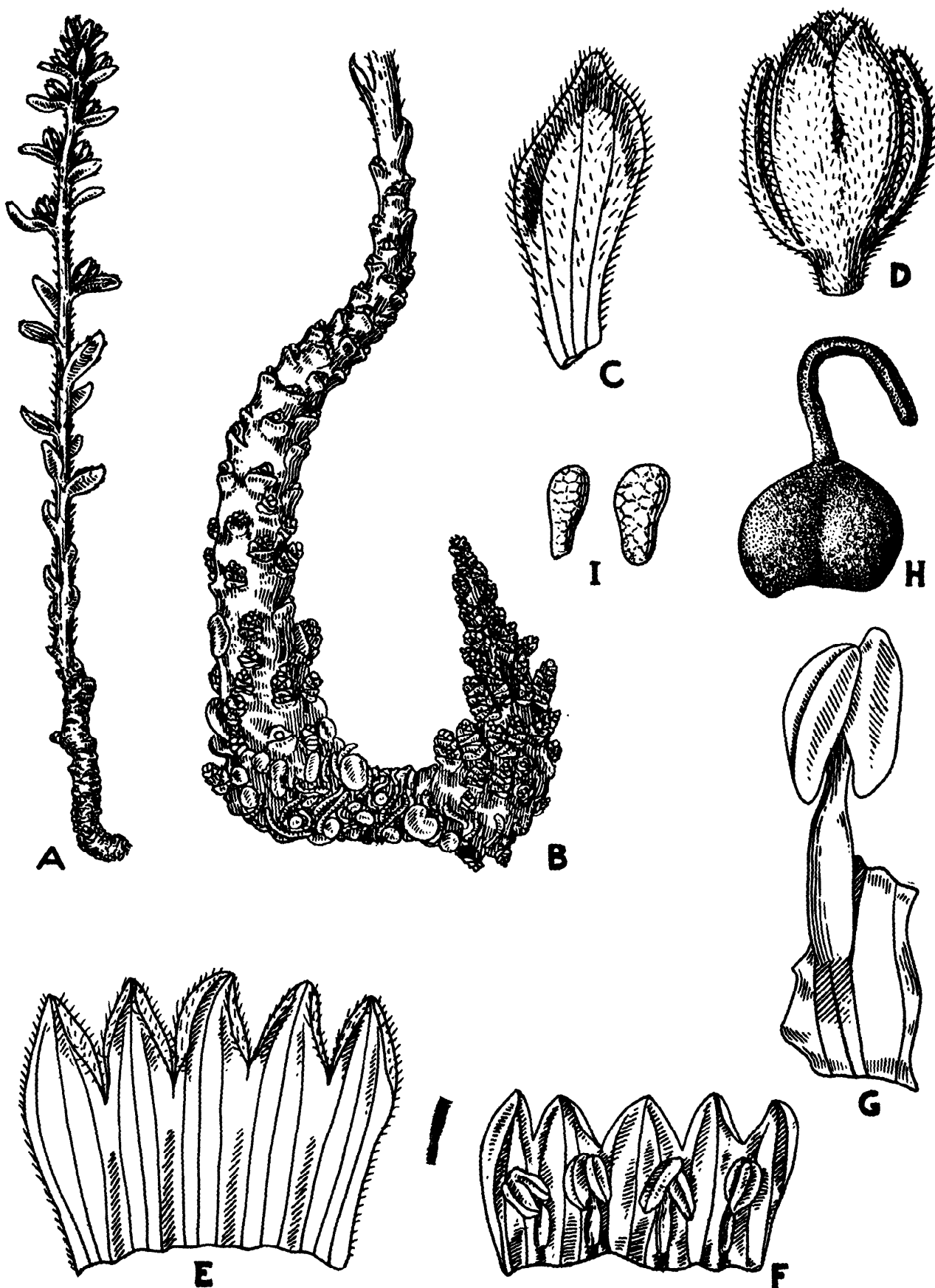


Fig. 2. *Alectra parasitica* A. Rich. var. *chitrakutensis* M. A. Rau, var. nov. A. Habit from herbarium sheet. (Specimens shrink considerably on drying). $\times 1$; B. Rhizomatous portion drawn from fresh specimen. $\times 1$; C. Bract. $\times 12$. D. Young bud with bracteoles. $\times 12$. E. Calyx split open. $\times 12$. F. Corolla and stamens spread open from young bud. $\times 12$. G. Stamen from open flower with glabrous filament. $\times 20$. H. Ovary with inflexed style. $\times 10$. I. Seeds. $\times 24$.