

A Note on the Chromosome Numbers of Some Eleusine Species.

N. S. RAU¹ (1929) considered 36 as the probable diploid number in the root-tips of *E. coracana* Gaertn. Avdulov² (1931) has determined 18 and 36 to be the diploid numbers in Eleusine and suggests 9 or 10 to be the basic number of the tribe *chlorideæ*. Hunter³ (1934) confirms the number 36 for *E. coracana* obtained by Avdulov.

The present investigation was taken up to determine the chromosome numbers in some of the local Eleusines. The following species, collected at Coimbatore, were studied:—*E. coracana*, Gaertn.; *E. indica*, Gaertn.; *E. brevifolia*, Br.; *E. ægyptiaca*, Desf. Flower buds were killed between 10-11 A.M. in the following fixatives: Carnoy's, Allan's modification of Bouin's and Fleming's (weak). Sections were cut at 10-12 μ and stained in hæmatoxylin and also gentian violet iodine.

The haploid chromosome numbers were determined in metaphase plates and at diakinesis as follows:—*E. indica*—9; *E. coracana*—18; *E. brevifolia*—18; and *E. ægyptiaca*—17. Secondary pairing was noticed in the last three species. It is evident that *E. indica* is a diploid, *E. coracana* and *brevifolia* are tetraploids, while *E. ægyptiaca* is probably a tetraploid with one

pair lost ($4x-2$). The basic number is, obviously, 9.

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¹ Rau, N. S., *Indian Jour. Bot.*, 1929, 8, 126.

² Avdulov, N. P., *Bull. Appl. Bot. Genet. & Plt. Breeding*, 1931, 43, 428; *Eng. Transl. Summary Imp. Bur. Plt. Genet. School of Agric.*, 633, 1; 576, 312; 576, 16.

³ Hunter, A. W. S., *Canadian Jour. Research*, 1934, 11, 213.

Two New Host-Plants of *Loranthus* at Allahabad.

THE partial parasite *Loranthus* commonly grows in the Upper Gangetic plain on a number of host-plants belonging to different families of the Dicotyledoneæ. They are especially found on trees or shrubs, the commonest hosts being *Mangifera indica* and *Bassia latifolia* (Duthie,¹ Brandis²).

In January 1935, the author observed this parasite growing on a guava (*Psidium Guayava*) tree, which was an unfamiliar sight. No other plant in the vicinity, but a number of guava trees in an orchard about 2 miles off, had *Loranthus* on them. On looking up the literature on the subject,



Fig. 1. *Loranthus longiflorus* on *Psidium Guayava*.



Fig. 2. *Loranthus* sp. on *Citrus medica* var. *acida*.



Fig. 3. The same as Fig. 2. showing the secondary roots and haustoria of the parasite.