

A NOTE ON THE OCCURRENCE OF SMALL OUT GROWTHS ON THE CALYX RING OF THE COTTON FLOWER

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The author of this note has observed for the past four seasons (1929—'33) some peculiar out-growths or organs on the calyx ring of flowers produced in one of the pure lines of cotton, No. 54, a 'North-erns' Selection (*Gossypium indicum*) grown on the Agricultural Research Station, Nandyal. A fair percentage of flowers produced by this culture were found to have these organs, three in number and about two or three millimeters long when fully developed. Sometimes, only two, also one, either fully developed or in a rudimentary stage have been noticed in the flower. These structures spring from the outer base of the calyx ring and are situated one opposite each of the three bracts. Their shape is either conical, ovate or obovate and often they are cup-shaped, the hollow orienting towards the bract and away from the calyx. Rarely, the organ occupies the entire height of the calyx ring and looks as though the proximal ends of two of the sepals of the calyx have reflexed outwards and given rise to each out-growth. The tissue of this supernumerary structure resembles that of the gamosepalous calyx ring—yellowish-green in colour and dotted with black glands so characteristic of the cotton plant—in contradistinction to the dark reddish-green involucre, also full of black glands in the tissue.

Robbins in his text-book (1) mentions the occurrence of intracal-cicary organs in upland cottons i.e., organs arising between the Calyx and Corolla and also observes that Cooke and Meade regard them as "Supernumerary calyx lobes or as representing free stipular elements of the calyx lobes."

Morphology of these structures apart, their presence serves as an ancillary distinguishing character for the culture.

In the F_1 of courses involving this strain, this character has been observed to be partially dominant.

Reference.

Robbins, Botany of crop plants.

A SUGARY EXUDATION FROM SORGHUM

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In a variety of sweet sorghum called *Tella Jonna* commonly grown in the Bellary district a sweet fluid is found to exude from the ear- of certain plants from the beginning of the flowering season. It