A NOTE ON THE VARIATION OF LEAF IN RAILWAY CREEPER

BY

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What we commonly know as Railway Creeper, is botanically the convolvulous member *Ipomaea pulchella*, Roth. (*I. palmata*, Forsk.) which is abundantly cultivated on railway platforms. It is a perennial twiner and bears purple, voilet or white flowers almost all the year round.

The leaves of this plant accommodate themselves in relation to each other rather very nicely and they form what is known as leaf-mosaic.

The leaves are palmate and are lobed almost to the very base. In the matter of lobation, we find a good deal of variation. A collection of such leaves was made at Indore in 1930, and the conclusions then arrived at, have recently been tested at Cuttack. The results obtained are concordant.

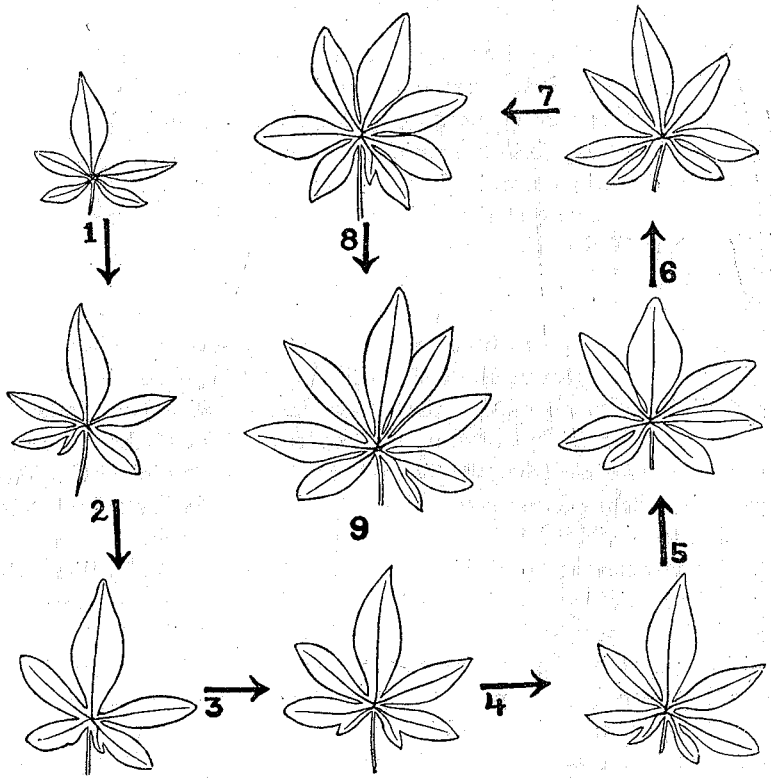
The commonest number of lobes in a leaf is five and it has, therefore, been regarded as the central or the mother-type. The higher number of lobation—the rarity of which increases with its increasing number—in a leaf, is certainly a dynamic modification of the central type, perhaps under cultivation.

The possible line of variational change is indicated in the text-figure where it is at once clear that No. 1 is the mother-type round which others are but simple variants.

The left lower lobe of No. 2 and right lower lobe of No. 3 and both the right and left lobes of No. 4, have already produced one lobule each. An indication—though an incipient one—of the formation of another lobule on the left lobe of No. 3 is, however, clearly discernible. Nevertheless, No. 4 condition becomes gradually very much more developed, as we follow Nos. 5–7. A step in advance, in the state of affairs, is found in Nos. 8–9 where the right lobule in its turn is found to be producing a further lobulation with the consequent result that in No. 9 we have a total of eight lobes.

A glance at the text-figure brings out a very striking feature namely that the two lowermost lateral lobes (of the mother-type) alone seem to have taken part in the modifications referred to and the three central ones have so to say remained static. It will then

further be seen that after these two laterals have produced their quota of one lobule each, they also like the central trio become inert and they, so to say, pass on the duty of any further lobulation to the two newly formed lobules.



Text-Figure: *Ipomaea pulchella*, Roth. (Railway Creeper): Leaves showing variation of the lobes. The possible line of modification is indicated by the arrows. × ½.

The facts presented in this note are rather interesting from the point of view of variation but they are left as they are without entering into any discussion.

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