

Two varieties of tobacco, *Nicotiana alata grandiflora* and *N. forgetiana*, were crossed by East. They differ mainly in the size and color of the flower. The corolla is three times as long in one as in the other variety, as seen in Fig. 55. In the table, page 185, the lengths of the corolla in the two varieties,

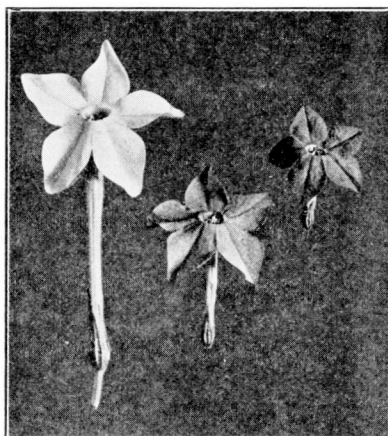


FIG. 55.—At the left a flower of *Nicotiana alata grandiflora*; at the right a flower of *N. forgetiana*; in the middle the F_1 hybrid. (After East.)

in the F_1 , and in the F_2 plants are given. The table shows the small *variability* of the parents. The F_1 generation is intermediate in length and also shows little variability, while the F_2 generation gives no definite ratios but exhibits great variability (Fig. 56), and overlaps the two grandparental types, although only a few flowers in F_2 are identical in size with those of each of the two grandparental types. These results are those expected if the two parent varieties