A SPONTANEOUS VARIANT WITH LARGER FLOWERS IN *JASMINUM AURICULATUM* VAHL.

Jasminum auriculatum is widely grown in India both for cut-flowers and for perfume. Despite its economic importance, breeding aspect of *Jasminum* has received attention only recently[1].

A variant was detected as a chimera in 30 months old seedling of a *J. auriculatum* clone obtained from Coimbatore. An entire branch arising from the basal region was found to bear larger flower buds. A comparative study of the variant and the source seedling revealed conspicuous differences for 13 of the 16 exomorphic characters studied (Table I). The variant excelled parent seedling (as well as some of the cultigens) in such economically important characters as length of flower bud, width of flower bud, length of corolla tube, diameter of opened flower, number of petals, length of petal, width of petal and 100-flower bud weight to deserve exploitation as a new cultivar.

Studies on the chromosomal make-up of the source seedling and natural variant revealed parity in chromosome number, *i.e.*, $2n=26$, thereby negating the role of numerical change in the chromosomal complement for the observed variation. Detailed meiotic study of the variant is underway. The presence of four stamens in the variant against two of the source seedling is of taxonomic interest.

TABLE I

Mean values of morphological characters of normal and variant types of Jasminum auriculatum *Vahl.*

Sl. No.	Character	Normal	Variant	*t* value
1.	Length of terminal leaf (cm)	4·92±0·050	5·07±0·083	1·521
2.	Width of terminal leaf (cm)	3·30±0·038	3·78±0·066	6·263**
3.	Length of lateral leaf (cm)	1·70±0·074	2·35±0·046	7·391**
4.	Width of lateral leaf (cm)	0·95±0·048	1·38±0·036	7·064**
5.	Length of flower bud (cm)	2·52±0·013	3·36±0·025	29·599**
6.	Width of flower bud (cm)	0·40±0·004	0·62±0·010	20·055**
7.	Length of Corolla tube (cm)	1·54±0·019	2·12±0·015	23·678**
8.	Diameter of opened flower (cm)	2·46±0·020	3·12±0·020	22·974**
9.	Number of petals	7·24±0·119	10·48±0·259	11·361**
10.	Length of pet l (cm)	1·03±0·014	1·31±0·015	13·229**
11.	Width of petal (cm)	0·53±0·009	0·64±0·010	8·490**
12.	Length of style (cm)	0·72±0·01	0 70±0·01	1·443
13.	Number of stamens	2·00	4·00	..
14.	Length of anther (cm)	0·43±0·01	0·54±0·01	7·074**
15.	100-flower bud weight (gm)	5·97±0·02	12·03±0·09	22·574**
16.	Size of the pollen (microns)	51·32±0·98	51·04±0·87	0·212
17.	Pollen fertility (percentage)	88·13	54·90	..

** Indicates the significance at 1% level of probability.

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