

A note on the Chromosome Numbers of Citrus Species

By

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At the recent conference on "Symposium on the Origin and Distribution of Cultivated plants of South Asia" held at New Delhi under the joint auspices of the UNESCO and the Indian Society of Genetics and Plant Breeding it was expressed by the worker in Citrus that the chromosome numbers in the citrus species grown in India were not known and their knowledge would help in the proper classification and study of the species. At the Fruit Research Station, Kodur a fairly large collection of the species and varieties of citrus of commercial importance to S. India has been maintained. As a preliminary step in the cytogenetical study of these citrus plants the chromosome numbers of some of them were determined and as it may help other investigators the following list has been published. The numbers recorded relate strictly to the seedlings raised from fruits collected from trees at Kodur. The materials for study of the root tips were collected from seedlings growing at the nursery by carefully washing away the soil. In other cases raising the seedlings in pots with higher quantity of sand facilitated collection. Flower buds were fixed in Karpechenko and root tips in Craff A and B. It is to be noted that there are no triploids met with in this collection and seedless forms are all diploids. Except *Citrus madraspatana* Hort. *C. pennivesiculata* Tanaka, and *C. jambhiri*, Lush. the others are known species and investigated numbers conform to those already determined.¹ *C. jambhiri*, Lush. is probably synonymous with *C. limonia*, Osbeck.

Acid lime	<i>C. aurantifolia</i> , Swingle	2n = 18
Herale	<i>C. aurantium</i> , Osbek.	„ = 18
Lemon	<i>C. limonia</i> Osbeck (Lucknow, seedless)	„ = 18 n=9 (tree No. 32/3)
Italian lemon (seedless)	do.	„ = 18
Villa Franca (seedless)	do.	„ = 18
Nepali round lemon	do.	„ = 18
Pummelo	<i>C. grandis</i> Osbeck.	„ = 11
Sathgudi	<i>C. sinensis</i> Osbeck.	2 = 18 n = 9 (S.R.T. tree No. 4 guard row)
Bengal citron	<i>C. medica</i> Lin.	n = 9 (Tree No. 3215)
Kichli	<i>C. madraspatana</i> , Hort.	2n = 18
Gajanimma	<i>C. pennivesiculata</i> Tanaka	n = 9 (S.R.T. tree No. 4 guard row.)
Jambhiri	<i>C. jambhiri</i> Lush. (<i>C. limonia</i> Osbeck)	n = 9 (S.R.T. tree No.6. S. guard row)
Kumquat	<i>Fortunella crassifolia</i> , Swingle	n=9 (tree No. 18/4)

1. Darlington, C. D. and E. K. Janaki Ammal (1945)—Chromosome atlas of cultivated plants. George Allen & Unwin Ltd., London.