

their identification was a comparatively easy matter though as a precaution they were kept for a few days longer in the Laboratory aquarium tanks and the identification verified. In this manner the identity of the final stages of the larvæ of all the above-mentioned species has been determined. The photographs given show the final pelagic stage of the larva and the corresponding young *Squilla* into which it metamorphosed in each case. Fuller details in regard to the larval stages of the species of *Squilla* of the Madras Coast will be given in a separate paper.

K. H. ALIKUNHI.

R. GOPALA AIYAR.

University Zoological Research

Laboratory, Madras,

February 11, 1942.

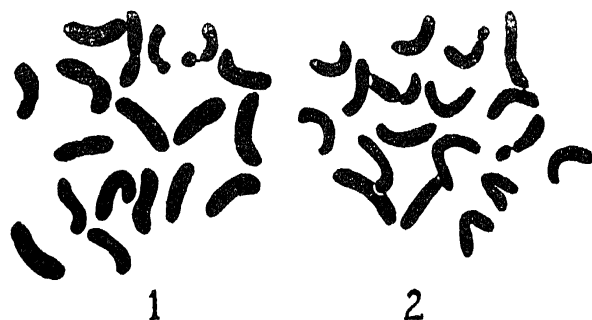
- 
- Bigelow, R. P., *Proc. U. S. Nat. Mus.*, 1894, 17.  
 Brooks, W. K., *Challenger Report*, 1896, 16.  
 —, *Mem. Nat. Acad., Washington*, 1893 5.  
 Claus, C., *Abh. Ges. Wiss., Göttingen*, 1871, 16.  
 Faxon, W., *Mem. Mus. Comp. Zool. Harvard Coll.*, 1882, 9.  
 Giesbrecht, W., *Fauna u. Flora d. Golf. v. Neapel.*, 1910, 33.  
 Hansen, H. J., *Erget. Plankton-Expt.*, 1895, 2.  
 —, *Siboga-Expedition*, 1926, 35.  
 Jurich, B., *Wiss. Ergebn. d. Deutsch. Tiefsee-Expt. und d. dampfer "Valdivia"*, 1898-99, 1904, 7.  
 Komai, T., *Annot. Zool. Jap.*, 1929, 12.  
 Muller, F., *Arch. Naturg.*, 1862, 28.  
 —, *Ibid.*, 1863, 29.

#### CHROMOSOME NUMBER IN *CARICA*

THE genus *Carica* consists of nearly 50 species (*vide* Index Kewensis) all of which are indigenous to Tropical America and are described as dioecious except *C. papaya*, in which different sex types have been noted. In connection with an investigation into the cytology of the different sex types of *C. papaya*\* it was felt that an examination of the chromosomes of the strictly dioecious species of *Carica* would be helpful. Requests for seeds of different species of *Carica* were sent to various institutes and Agricultural stations in America, but due to the present difficulties of communication we received only seeds of two species, namely, *C. pubescens* Lenne and Koch and *C. posopora* L. Of

these the latter did not germinate, while plants of the former are being grown for further study.

Examination of the root tips of *C. pubescens* revealed 18 chromosomes at metaphase (Fig. 1). In Fig. 2 a metaphase plate from root tip of *C. papaya* is given for comparison. The same chromosome number has been reported in all the other investigated species of *Carica*; *C. candamarcensis* Hook. fil., *C. cauliflora* Jacq., *C. chrysopetala* Heilborn., *C. Peltata* Hook and Arn., *C. pentagona* Heilborn., and *C. quercifolia* Benth. and Hook. (Storey, 1941).<sup>1</sup> Storey has stated that though no critical comparative study of the chromosomes have been made, these species exhibit chromosomes more or less similar in size and morphology suggesting a close relationship among them.



1 Somatic metaphase from *C. pubescens*. × 3,000

2 Somatic metaphase from *C. papaya*. × 3,000

In *C. pubescens* we note that the chromosomes are slightly larger than those of *C. papaya*, though the number is the same and position of attachment constriction is median or submedian in all the chromosomes of both species. No distinctly heteromorphic pair of chromosomes could be noted in this dioecious species also.

We are indebted to His Majesty's Consul-General at Havana, Cuba, for the seeds of the two species of *Carica*.

L. S. S. Kumar.

A. ABRAHAM.

College of Agriculture,

Poona,

December 22, 1941.

---

\* Scheme of research on the "Cytology of Papaya" financed by the I. C. A. R.

<sup>1</sup> Storey, W. B., 1941: *Hawaii Ag. Expt. Station Bull.*, No. 87, pp. 6-7.