phenyl proponoid biosynthesis by the toxins at low concentrations, they could be compared with the phyto-alexin elicitors. In this context, it is relevant to recall that simple sugars, crude fungal extracts and phytotoxic metabolites were known for their induction of phytoalexins[9-12].

The author expresses his gratitude to Dr K. M. Rao, C. A. S. in Botany, University of Madras, for valuable suggestions. Thanks are due to the University Grants Commission and the University of Madras, for providing funds and equipment for this work.

14 February 1985; Revised 23 April 1985

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B-CHROMOSOME IN *TRICHOSANTHES LEPINIANA* (Naud.) Cogn. (CUCURBITACEAE)

V. S. PANDEY and SUNIL SARAN
Department of Botany, Patna University, Patna 800 005, India

B-CHROMOSOMES or supernumerary or accessory chromosomes are dispensable and non-homologous with basic A-chromosome compliment. The occurrence of B-chromosomes in 591 species from 290 genera of flowering plants has earlier been reported[1]. B-chromosomes are very rare in the family Cucurbitaceae. However, B-chromosomes have been reported in some cucurbits, namely *Melothria maderspatana*[2], *Trichosanthes anguina*[3] and *Cucumis* Spp[4].

The present communication reports the presence of a single B-chromosome in *T. lepiniana*, a wild species of *Trichosanthes* abundantly found in Sikkim Himalayas. It has a neutral effect in this species as has been found in a number of other angiosperms with a low number of B's.

Meiotic study revealed the presence of 11 regular bivalents with a single B-chromosome in all metaphase I and anaphase I plates. The supernumerary chromosomes was also observed in somatic cells examined through acetocarmine squash of leaf tips.

25 July 1985

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A CASE OF TRUE POLYEMBRYONY IN *LUMNITZERA RACEMOSA* WILLD

K. K. LAKSHMANAN and
V. NARMATHA BAI
Department of Botany, Bharathiar University, Coimbatore 641 046, India.

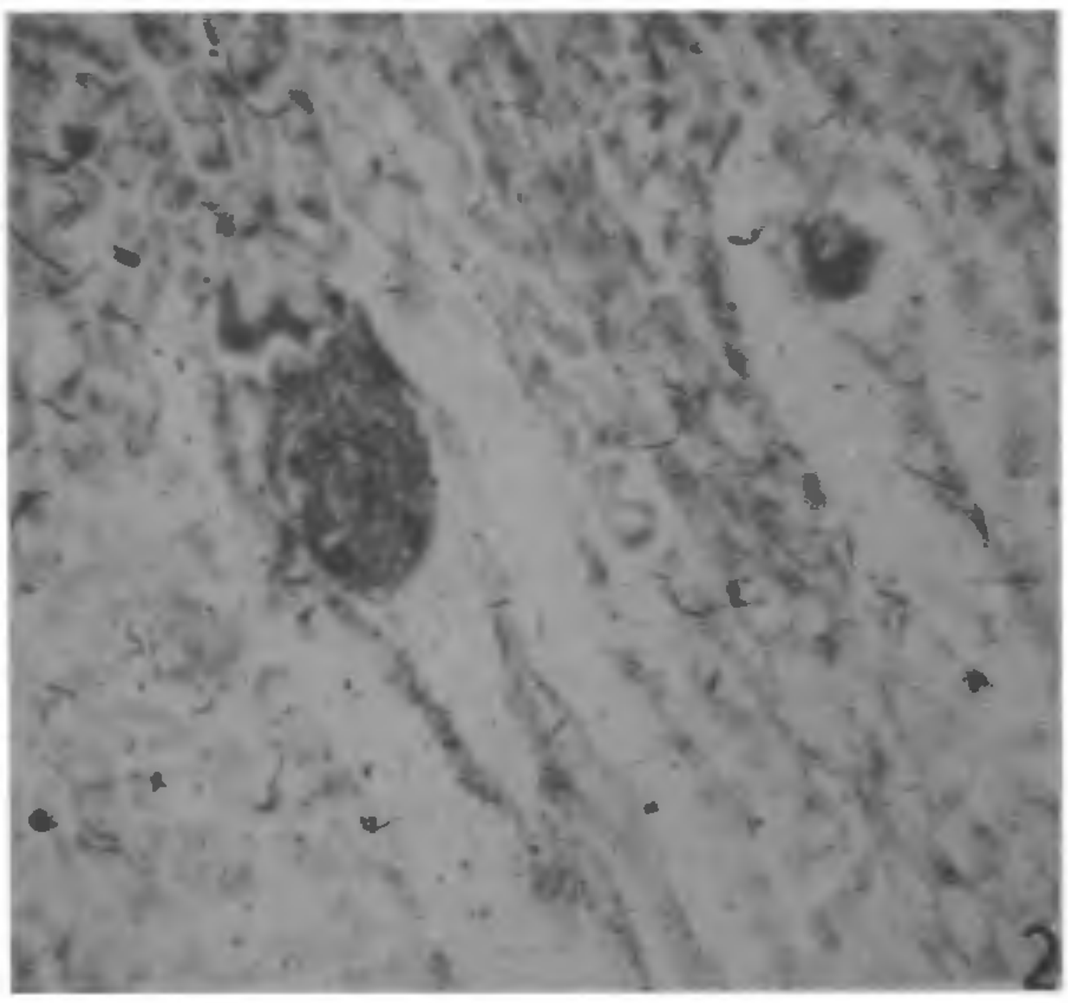
POLYEMBRYONY is a characteristic feature in a few families of angiosperms. It is defined as the production of more than one embryo per seed with or without sexual reproduction[1].

Lumnitzera racemosa, a mangrove member of the family Combretaceae, exhibiting true polyembryony is reported here. This is perhaps the first report of true polyembryony among the mangroves.

L. racemosa occurs commonly in Pichavaram and Rameswaram mangrove forests of Tamil Nadu[2]. It is a tree with succulent leaves. The white flowers, arranged in a racemose inflorescence are strictly ac-

tinomorphic. The ovary is inferior with 3–5 anatropous ovules suspended on a long slender funicle.

Normally the female archesporium is single-celled. In a few cases the archesporium is multicellular. Further, development of more than one archesporial cell results in twin megaspore mother cells. They are positioned parallel to each other along the long axis of the ovule resulting in twin embryosacs (figure 1).



Figures 1–2. *Lumnitzera racemosa* **1.** Twin embryosacs inside a common integument (× 30). **2.** Embryosacs with embryos at different stages of development (× 55).

In such cases, the twin embryosacs are enveloped by a common double integument. Both the gametophytes are functional and develop endosperm. It is obvious that the development of embryos in both the embryosacs is due to double fertilization involving two pollen grains entering through the common micropyle. However, the embryos are at different stages of development: in one, the embryo has reached a globular stage, while in the other it has stopped short at 2–3-celled stage (figure 2). Nevertheless both the embryos are healthy with regular cell alignment.

Kumar and Joshi[3] reported polyembryony in *Rhizophora mucronata*, a mangrove member of the family Rhizophoraceae. In this case two seeds have germinated *in situ* simultaneously in a viviparous manner. Rajagopalan and Natarajan[4] reported a similar case in the same species. In addition, they observed fruits with three hypocotyls. They are cases of more than one seed viviparously germinating within a fruit.

Polyembryony in *L. racemosa* falls under the category of multiple polyembryony, where the accessory embryos are produced from two embryosacs in the same ovule[5].

This work was supported by a financial grant from Department of Science and Technology, New Delhi.

30 April 1985

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