

studied. In 95% cells eight mitotic chromosomes were observed, which were rod-like and almost

equal in size (Fig. 2). However, in about 5% cells in addition to eight chromosomes one small chromosome was also found (Fig. 3).

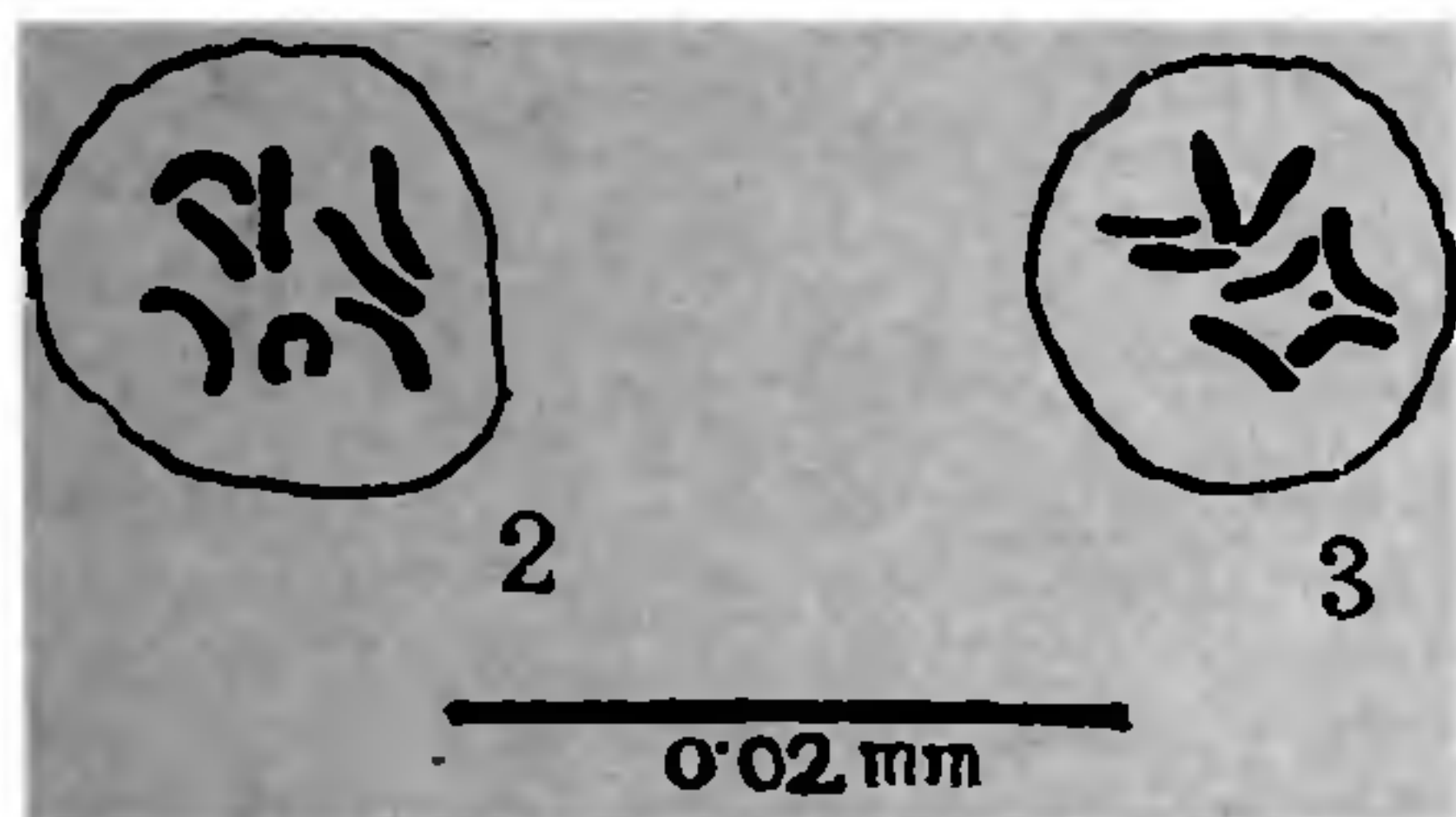
In contrast to the findings of Showalter, who reported nine chromosomes in 80% cases, the occurrence of the 9th chromosome was only 5% in the present study. It appears that in *C. conicum* chromosome number is eight ($n=8$) in their gametophyte, and the ninth chromosome could be a detached part of any of the eight chromosomes. The stable occurrence of eight bivalents in spore mother cells also supports this finding. Thus the haploid chromosome numbers in *C. conicum* is eight ($n=8$).

I am grateful to Dr. Ram Udar for his kind help in the preparation of this paper.

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Nainital, April 2, 1974.

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FIGS. 1-3. Fig. 1. Spore mother cell with eight bivalents. Fig. 2. An androcyte cell with eight chromosomes. Fig. 3. An androcyte cell with eight normal and one small fragment of chromosome.

SHORT SCIENTIFIC NOTES

A New Record of *Astronia macrophylla* Bl. (Melastomataceae) from Great Nicobars and its Phytogeographical Significance

Blume¹ established the genus *Astronia* on the basis of two species, *Astronia spectabilis* Bl. and *A. macrophylla* Bl. from Java. This is a genus of small trees and shrubs bearing polygamo-dioecious flowers with inappendiculate anthers. The genus *Astronia* Bl. (*sensu stricto*) includes about 56 species (excluding *Astronidium* A. Gray) and occurs in Malaya, Sumatra, Borneo, Java, Moluccas, Celebes, New Guinea and Formosa. The Philippine-Papuan region is probably the centre of origin of the genus, since out of the 56 species, this region accounts for about 54 species.

Among these, the widely spread species are *Astronia macrophylla* Bl., *A. smilacifolia* Triana and *A. cumingiana* Vidal. On studying the specimens collected by Rogers from Great Nicobar Island

C.G. Rogers 48 was found to match with *Astronia macrophylla*, hitherto reported only from Sumatra, Borneo, Java (Backer and Bakhuizen²) Moluccas and Celebes. This new record from Great Nicobar Island extends the known distribution of *A. macrophylla* from Philippines and Indonesia to Andaman and Nicobar group of islands, which form the insular land bridge connecting Sumatra in the South with Arakan mountains of Burma in the north. Since this is the first record for the Indian flora, a brief description is given.

Astronia macrophylla Bl., *Bijdr. Fl. Ned. Ind.* No. 17: 1080. 1826; Cogniaux in DC. *Monogr. Phan.* 1096, 1891.

Trees 5-12 m tall; branches brown, fufuraceous. Leaves opposite, elliptic or ovate-elliptic, 20-35 × 8-17 cm, base rounded, apex acuminate, under surface along the nerves fufuraceous, 3-5 plinerved; veins prominent; petiole 5-10 cm long, fufu-

raccous. Inflorescence 10–17 cm long, densely furfuraceous. Bracts lanceolate, 6–10 × 2–2.5 mm; bracteoles linear, 2–3 mm long. Calyx tube campanulate, 2–2.5 mm long, 10-ribbed, furfuraceous; teeth triangular, 0.5 mm long. Petals 5, free concave, obtuse, brown, 2.5–3 mm long. Stamens 10; filaments 2.5 mm long; anthers 1.5–2 mm long. Ovary fully concrescent with the calyx tube; extraovarian chambers absent; styles 2–4 mm long; stigma capitate.

Great Nicobar: C.G. Rogers 48 (CAL); S. Ahmadali 58 (CAL).

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Botanical Survey of India,
Andaman and Nicobar Circle,
Port Blair, August 21, 1974.

N. G. NAIR.

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Oldenlandia umbellata L.—An Addition to the Flora of Northern India

J. D. Hooker¹ records the distribution of *Oldenlandia umbellata* L. for India from Western peninsula—from Orissa southwards. Subsequently, the plant has also been recorded by Prain² from Bengal. This species has neither been recorded in their lists by Rau³ or Singh⁴ for the Upper Gangetic Plain nor in any "Floras" of Punjab or as a new record for the Punjab plains by Nair and Nair⁵. As far as is known it has not yet been reported from India north of Punjab. Apparently this is a new introduction in the flora of north India. Some plants of this species were collected from a locality in Punjab. The description that follows is from those specimens.

A diffuse, glabrous (very rarely scaberulous on the angles) annual. Stems 4–12.5 cm long, semi-woody and branched at the base, angular. Leaves often fascicled, spreading or recurved, sessile, linear, or almost acicular, 0.4–2.3 × 0.05–0.3 cm, flat with recurved margins, acute. Stipules short with several bristles on the upper margins. Flowers

± 3 mm long, white, 3–7, axillary or umbellate on axillary peduncles, chiefly in the upper axils. Peduncles shorter or longer than the leaves, erect, stout. Pedicels very short. Calyx-tube (in flower) 1 mm long, teeth 4, 1 mm long, subulate, ciliate, nearly equalling the corolla-tube. Corolla glabrous, lobes 4, triangular-oblong. Stamens 4, inserted near the throat of the corolla-tube. Capsule 2 × 2.5 mm, glabrous, crowned with distant calyx-teeth shorter than the capsule. Crown of the capsule not protruded. Seeds many, dark brown, shortly oblong, angled, smooth.

Specimens examined: M. Sharma 3224 (PUN).

Locality: Samana (alt. 240 m) in Patiala District of Punjab. Among grasses along a water channel.

Flowers and Fruits: November–January.

Distribution: Sri Lanka (Ceylon), Burma.

But for its inflorescence the plant resembles much with the prostrate forms of *Oldenlandia corymbosa* L. Many-flowered and umbellate inflorescence immediately separates it from other Indian species of *Oldenlandia* (*sensu str.*) except *O. wightii* Hook. f. which is a perennial herb with scabrid branches and leaves, capitate cymes and long, triangular-lanceolate, pungent calyx-teeth that equal the depressed capsule.

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Punjabi University,
Patiala (Punjab), August 23, 1974.

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