

Figures 1–16: *Ischaemum jayachandranii*, sp. nov. 1. Plant; 2. Joint (rhachis); 3. Sessile spikelet; 4. Lower glume of the sessile spikelet (ventral view); 5. Upper glume (dorsal view); 6. Lower lemma (ventral view); 7. Palea spread open (dorsal view); 8. Upper lemma (notched with rudimentary awn—dorsal view); 9. Same (entire and without awn—dorsal view); 10. Palea (ventral view); 11. Lodicule; 12. Stamen; 13. Pistil; 14. Pedicelled spikelet; 15. Lower glume of the pedicelled spikelet (ventral view); 16. Upper glume (dorsal view).

Jayachandran Nair, in recognition of his remarkable contributions to the studies on South Indian Grasses.

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A NEW SPECIES OF *TRYBLIDIOPSIS* KARST. FROM THE EASTERN HIMALAYAS

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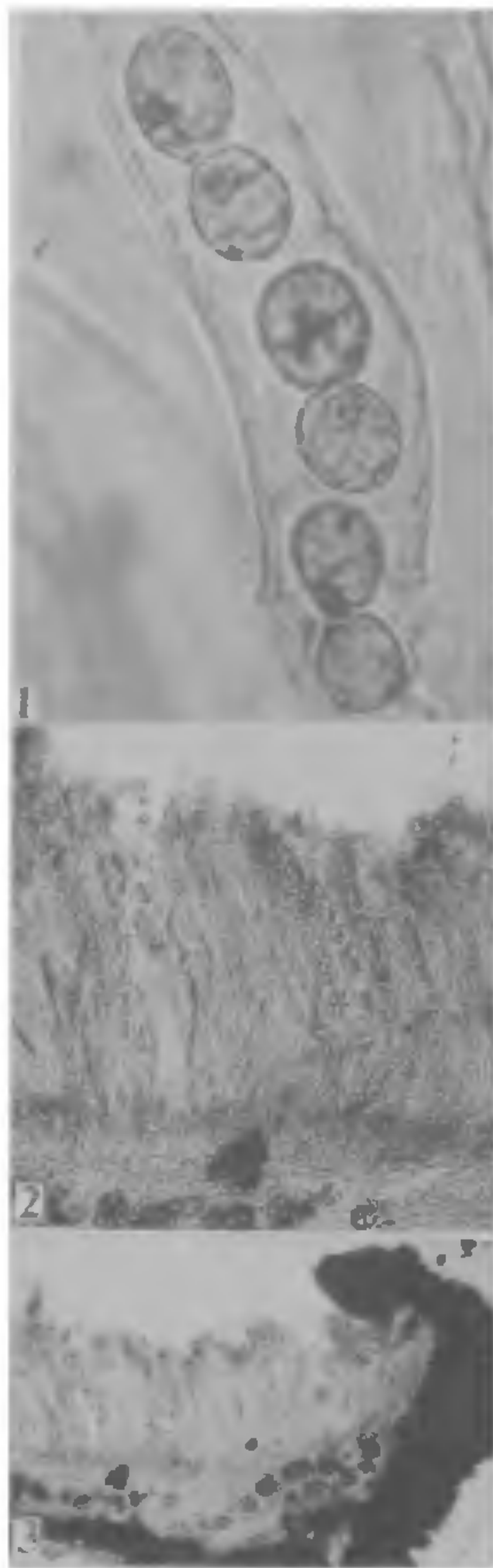
DURING the fungal forays of 1979, an undescribed bitunicate loculo ascomycetes belonging to the genus *Tryblidiopsis* Karst. was collected from the Eastern Himalayas. The specimens are deposited in Herbarium, Botany Department, Panjab University, Chandigarh (PAN) and Plant Pathology Herbarium, Cornell University, Ithaca, New York, USA (CUP).

Tryblidiopsis arendholzii R. Sharma. (figures 1–3)

Ascomata erumpentes, sparsa sessiles, solitaria vel bina ad quaterna aggregata, molles, nigres. Margo dentatus, usque ad 4 mm diam. et altitudo tota 1 mm. Hymenium porphyreum. Asci quadri- ad octospori, poro jodo non caerulescente, $216-252 \times 16-18 \mu\text{m}$, clavati-cylindranei, paries crassus et gelatinosus, apex obtusus. Ascospores hyalinae, $14-28 \times 3-10 \mu\text{m}$, late ellipsoideae, constrictae in medianum, guttulatae. Pseudoparaphyses filiformes, in gelatina inclusae, irregulariter ramosae, tumidae ad apices, usque ad $3.6 \mu\text{m}$ latae, ascos superantes ad $18 \mu\text{m}$. Excipulum ectalum ex textura angularis, atrobrunneum. Excipulum medullatum ex textura intricata hyalina. In excipulo medullato massae crystallinae observantur.

Holotypus: In caulibus mortuis, Tiger Hill, Darjeeling (Benghala occidentalis), 18 August, 1979, Raghunandan Sharma, PAN 17164. In herbario Cryptogamarum universitatis Panjab, Chandigarh.

Ascomata erumpent, scattered, occurring singly or in groups of two to four, soft, external surface black, margin dentate, raised and inrolled on drying, up to 4 mm in diameter and up to 1 mm in total height, hymenium plane, reddish brown, Asci 4–8 spored, J-, bitunicate, $216-252 \times 16-18 \mu\text{m}$, clavate-cylindric, thick-walled, (up to $1.8 \mu\text{m}$ thick) apex obtuse. Ascospores large, hyaline, $14-28 \times 3-10 \mu\text{m}$, broadly ellipsoid, 1-septate, constricted at the septum, enveloped in a gelatinous sheath, uniseriate. Pseudoparaphyses hyaline, filiform, embedded in a gelatinous matrix, irregularly branched and swollen at the apices, up to $3.6 \mu\text{m}$ wide, projecting up to $18 \mu\text{m}$ beyond the tips of asci. Ectal excipulum textura angularis, up to $72 \mu\text{m}$ thick, cells up to $18 \times 14 \mu\text{m}$, dark brown; medullary excipulum textura intricata, hyaline, up to $108 \mu\text{m}$ thick. Crystalline masses in groups are observed in the medullary excipulum.



Figures 1–3. 1. Ascospores $\times 1120$.
2. Hymenium $\times 220$.
3. Vertical section of Ascomata $\times 110$.

Collection examined: R. Sharma 17164 (PAN, CUP-IN 589), on dead angiosperm stem, angiospermous forest, Tiger Hill, Darjeeling, West Bengal, 18 August 1979. Leg. Raghunandan Sharma.

Etymology: In honour of Dr W. R. Arendholz.

Remarks: The above species differs from *Trybliopsis pinastri*¹ (Pers.) Rehm and *T. arnoldi* Rehm in having much longer 4–8 spored asci, broader ascospores and

growing on a different host. It also differs from these two species in having crystalline masses in the medullary excipulum.

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1. Rehm, H., *Ascomyceten*, 1896, 1, 1.

CHROMOSOME COMPLEMENT IN A CYDNID BUG, *LACTISTES TRUNCATO-SERRATUS* SIGN. WITH SPECIAL REFERENCE TO THE KARYOTYPE EVOLUTION IN CYDNIDAE

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A DIPLOID number of 12 chromosomes with XY-type of sex mechanism is met with in the cydnid bug, *Lactistes truncato-serratus* Sign. The genus is new to cytology. The evolutionary status of the family Cydnidae has also been discussed.

From the cytological survey, the family Cydnidae seems to be fascinating because it has a heterogenous group of bugs so far as their number of chromosomes is concerned^{1–7}. To trace the karyotypic evolution, in this group of bugs, a thorough cytological study of the family is all the more important. The present studies bring into light the chromosomes in meiosis in a still unexplored genus, namely *Lactistes* of the family, through its species *L. truncato-serratus* Sign.

Many individuals of *L. truncato-serratus* Sign. were collected during July 1980 from the light posts at night. Their gonads were processed following the procedure of Mittal and Joseph⁸.

L. truncato-serratus carries $2n = 12$ (figure 1) with XY-type of sex mechanism. They constitute a single pair of long, 2 pairs of medium-sized, 2 pairs of small autosomes, and a heteromorphic pair of sex-chromosomes, X and Y (figure 2). The size of the various chromosomes ranges from 7.64–2.06 μm . (table 1).