Table 1 *Frequency of various chromosomal associations* at Metaphase-I in diploid and autotetraploid plants of Atylosia scarabaeoides.*

Plant No.	Associations IV	III	II	I	Pollen stainability %	Seed set/pod
C_{6-5}	5–6 (5.5)	—	10–12 (11.0)	—	29.2	0–5 (2.88)
C_{6-13}	5–8 (6.6)	0–1 (0.33)	6–10 (8.0)	0–1 (0.33)	33.8	0–2 (1.3)
C_{6-23}	0–10 (5.8)	—	2–22 (10.3)	—	64.24	0–4 (1.81)
C_{6-25}	6–7 (6.66)	—	7–10 (8.33)	0–2 (0.66)	—	0–4 (1.89)
C_{6-33}	4–9 (7.0)	0–1 (0.33)	4–12 (7.33)	0–1 (0.33)	31.14	0–2 (1.33)
C_{6-59}	2–6 (4.0)	—	10–18 (14.0)	—	36.08	5 (single pod harvested)
Control (Diploid)	—	—	11.0	—	89.5	2–6 (4.23)

Chromosome number $2n = 4x = 44$; * The figures in parenthesis represent average values.

Table 2 *Percentage of chromosomes involved in various chromosomal configurations**

Plant No.	Quadrivalents	Trivalents	Bivalents	Univalents
C_{6-5}	45.4–54.5 (50.00)	—	45.4–54.5 (50.00)	—
C_{6-13}	45.4–72.7 (60.00)	0–6.81 (2.25)	27.7–45.4 (36.36)	0–2.27 (0.75)
C_{6-23}	0–90.9 (52.72)	—	9.09–100.0 (46.81)	—
C_{6-25}	54.4–63.3 (60.60)	—	31.8–45.4 (37.86)	0–4.54 (1.50)
C_{6-33}	36.3–81.8 (63.63)	0–6.81 (2.25)	18.18–54.5 (33.33)	0–2.27 (0.75)
C_{6-59}	18.1–54.5 (36.36)	—	45.4–81.8 (63.63)	—

* The figures in parenthesis represent average values.

tetraploids as is apparent from table 1. Furthermore, pollen fertility does not seem to have any relationship with the number of seeds set per pod. The tetraploid progeny at C_6 level showed considerable variability for pollen stainability and the number of seeds set per pod. The occurrence of only euploid progeny at C_6 level indicates that a strong genetic balance is imposed during fertilization by elimination of unbalanced gametes. It is also possible that zygotes with unbalanced chromosome numbers fail to develop.

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PYTHIUM INFLATUM MATTHEWS, —A NEW RECORD FOR INDIA

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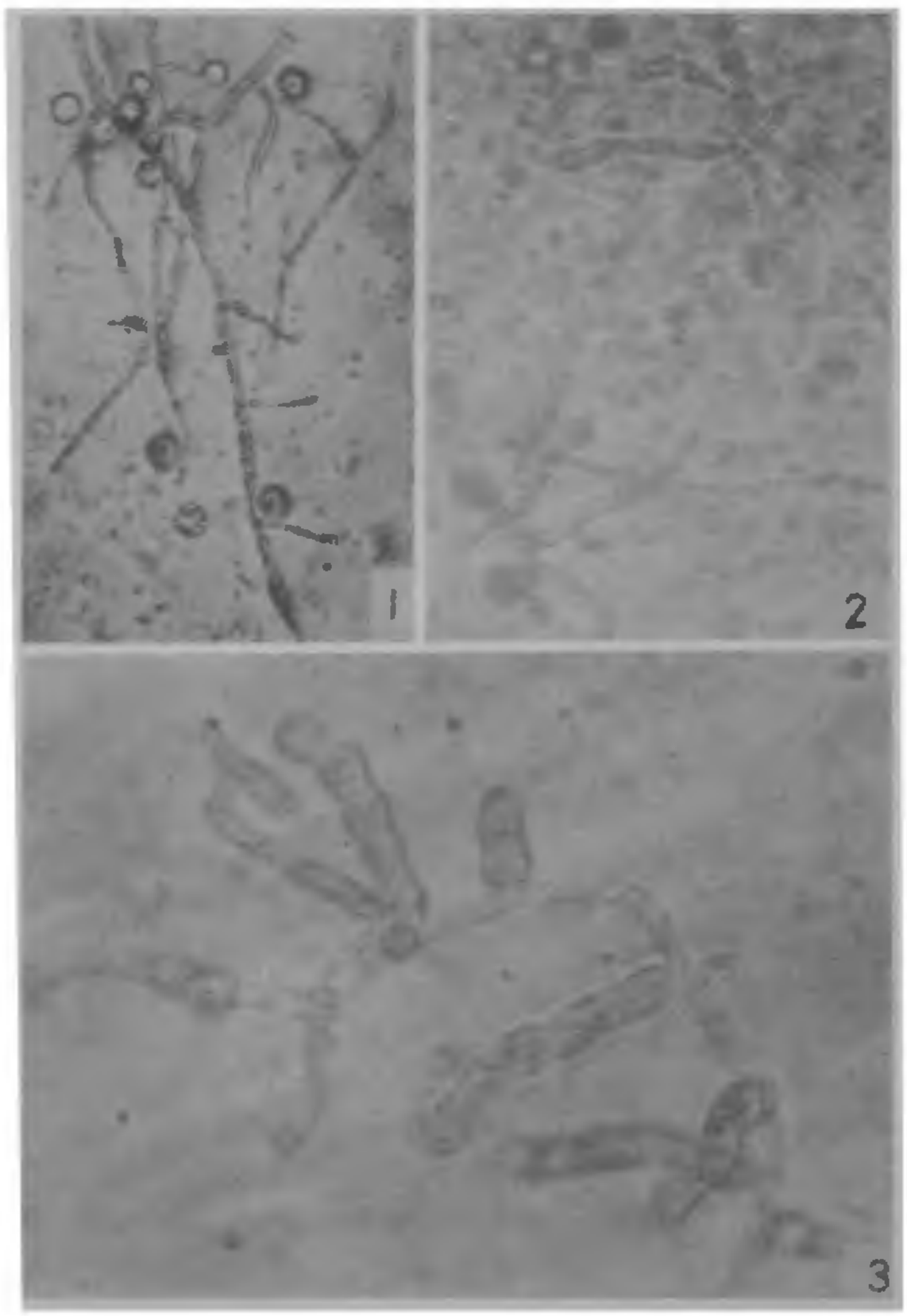
DURING the course of a study on root rot and seedling diseases of some vegetable crops grown in Tarai region of Nainital, *Pythium inflatum* Matthews was isolated from some rotted roots of tomato (*Lycopersicon esculentum* Mill.) and found to be a new record for Indian mycoflora.

Rotted roots of young tomato plants were collected in fresh polyethylene bags and brought to the laboratory. These roots were washed thoroughly in tapwater to remove the adhered soil particles and finally rinsed with three changes of sterilized water. These infected parts were cut into small pieces and placed onto agar surface for 4 days at 20–22°C. Fungus was cultured on boiled hempseed halves and identified using standard monographs[1-3]. The identity of the culture was also confirmed from the C. M. I. Kew, England (IMI-277412). The species is described as below:

Pythium inflatum Matthews, Univ. North Carolina Press, 45, 1931.

Colony showed radiate or rosett growth on Brassica Agar (BA), mycelial growth slow on hempseed halves; zoosporangia branched, inflated, lobulate complex, 8–21 μm in width, individual elements of variable size; zoospores formed within the vesicle formed at the mouth of sporangial branches, liberated by rupturing of vesicle wall; sex organs, however, were not formed in water culture but produced on Brassica Agar surface after 4–5 days of inoculation; oogonia spherical, terminal or intercalary, 18–24 μm in diameter; antheridia rarely formed, diclinous when present, 1–2 per oogonium; oospores spherical, 16–22 μm in diameter, plerotic.



Figures 1–3. 1. Formation of zoosporangia and oogonia, **2.** Lobulate zoosporangial complexes and oogonia formed in BA medium, **3.** Single lobulate zoosporangial complex.

Habitat: Isolated from rotted roots of tomato from Tarai, Nainital on Nov. 5, 1981.

The present isolate shows almost close agreement with the description given by Robertson[2] who pointed out that the lobulate sporangial complex is main identificational character in *P. inflatum* where sex organs are rarely formed. The present isolate produced their sex organs in BA medium[4] but failed in water culture.

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TWO SPECIES OF *ACHLYA* AS FISH PARASITES

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ALTHOUGH considerable work on fish parasitic fungi has been done abroad and many saprolegniaceous fungi are now known to parasitize the fish and their eggs, causing a great loss to fish population, our knowledge of Indian aquatic fungi in relation to fish infection is meagre[1,2].

During investigation on aquatic fungi, two fish species *viz Tor tor* (Ham.) and *Barilius bendelisis* (Ham.) infected with some saprolegniaceous fungi, were observed (figures 1A, B). White cottony mass of fungal hyphae were growing on their body in different patches. The fish were either lethargic or had succumbed due to the severity of infection. These infected fish were brought to the laboratory for further study.

A small bit of mycelium was removed from the infected area of the fish, washed thoroughly with sterile water and placed on agar plate (PDA) and boiled hempseed halves in sterile water. Pure unifungal and bacteria-free cultures were made by using well-known techniques and the isolates identified using Johnson's monograph[3]. The pathogen isolated from *Tor tor* was