

A NEW SPECIES OF HYGROCYBE KUMMER FROM INDIA

B.D. SHARMA, MISS S. DESHPANDE AND S.G. PRADHAN

Botanical Survey of India, Pune

ABSTRACT

A new species of *Hygrocybe* Kummer (Ord, *Agaricales*) viz. *H. boriviliensis* Sharma, Sandhya Deshpande & Pradhan is described.

During a botanical exploration of the Borivili National Park, Bombay the senior author came across an attractive mushroom having fire-red coloured cap. The critical investigation revealed that the proposed species is apparently similar to *Hygrocybe miniata* (Scop. ex Fr.) Kummer of Sec. *Coccineae* subsec. *squamulosae* (*sensu* Singer, 1975); however, it differs in darker stipe colour, yellow gill colour and absence of *Godfrinia* type basidia in the latter. The present specimen can be placed under sec. *Hygrocybe sensu* Singer, 1975) subsec. *obtuse* (Smith & Hesl.) Singer. It differs from the existing two species viz., *H. huronensis* (Smith & Hesl.) Singer & *H. flavescens* (Kauffn.) Singer [Smith & Hesl. 1942] under this sec. on account of white and yellow colour of the caps respectively in the latter two.

Hygrocybe boriviliensis Sharma, Sandhya Deshpande & Pradhan *sp. nov.*

H. boriviliensis Sharma, Sandhya Deshpande et Pradhan, *H. huronensis* (Smith & Hesl.) Valde Singer haec et *H. flavescens* (Kauffn.) Singer intersese Valde affinis sunt, praeter pileo et stipitato colouratae.

Holotypus: Sharma 169123, Borivili, in

parte regionis Indae austro-occidentalis. 22-8-1985.

Paratypus: Pradhan 169124, *ibid.* 11-9-1986.

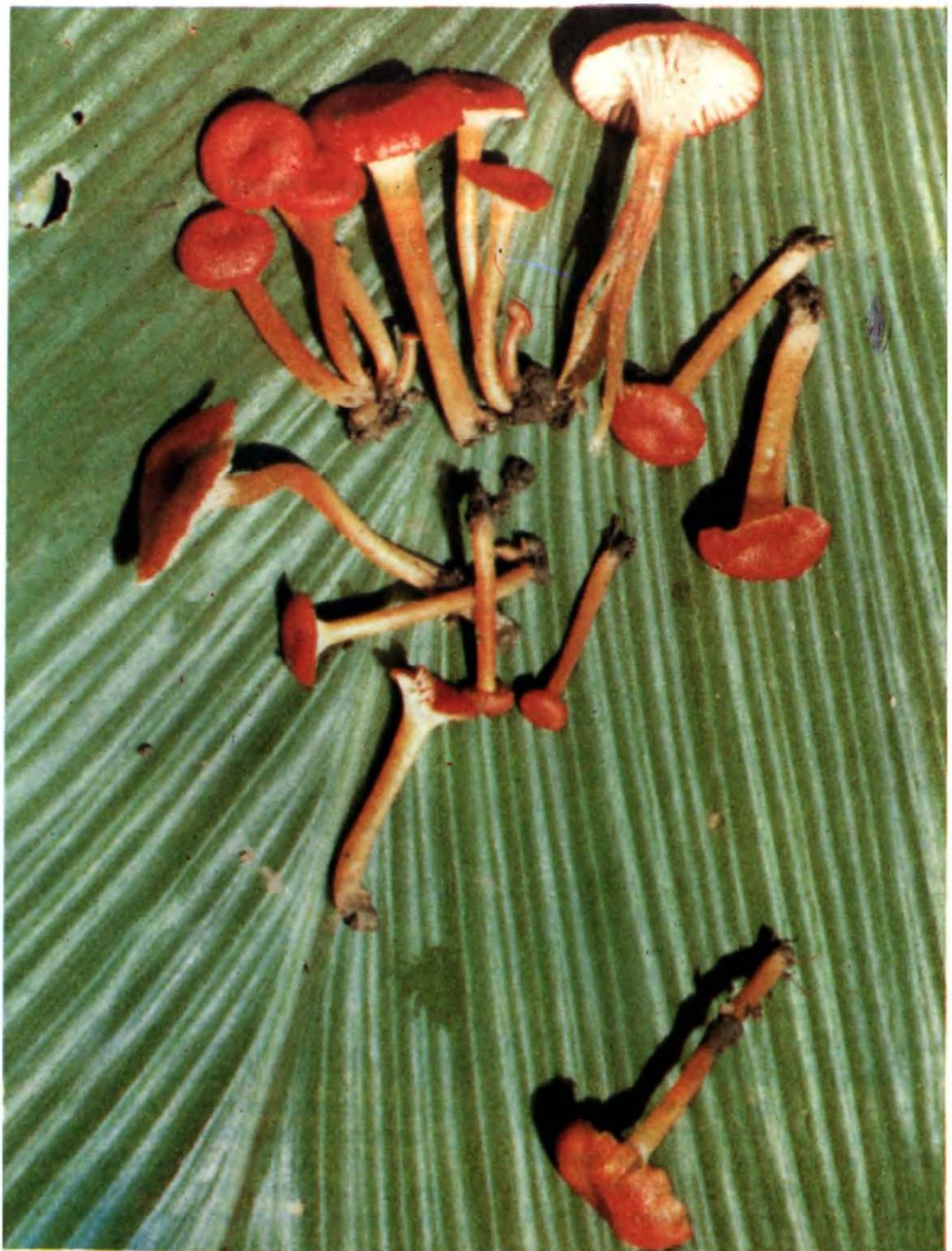
The detail description is provided below:
Hygrocybe boriviliensis Sharma, Sandhya Deshpande & Pradhan *sp. nov.*

Habit: Omphaloid.

Pileus: 1-3 cm in diam., scarlet-fire red fading to yellow on drying, obtuse-umbilicate, margin inflexed; context fleshy, confluent with stipe; surface smooth, epicutis a cutis, not well differentiated, consisting of non-inflated filamentous hyphae; tramal hyphae 5-8 μ m broad.

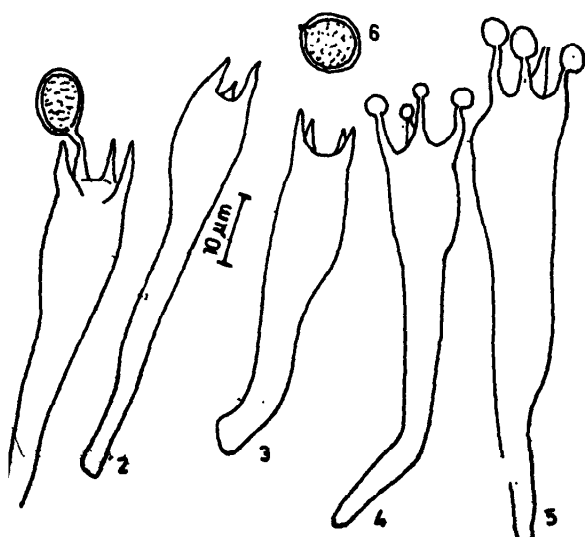
Lamellae: Decurrent, unequal in 3 sets; white, waxy, distant, up to 3 mm broad; trama homiomorous, subregular-regular; hyphae thin walled, hyaline, 3-10 μ m broad; surface euhymenial; subhymenium cellular, 10-15 μ m wide; pleurocystidia absent; basidioles many; edge fertile or occasionally pseudocystidia present.

Basidia: 50-60 $\times$ 8-12 μ m, tetra or bisporic, elongated, (Q=5.0-6.2), *Godfrinia* i.e. club shaped mixed with normal clavate basidia; sterigmata bold, 5-8 μ m long (Figs. 1-5).



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Basidiospores: $8-10 \times 7-8 \mu m$; sub-globose to broadly ovoid ($Q=1.1-1.2$), non-porate; apicule central or lateral wall thin, smooth, hyaline, inamyloid, acyanophilic, guttulate with fine guttulae (Fig. 6).



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Figs. 1—6 : 1—5. Basidia. 6. Basidiospore.

Stipe: 2.5-6.0 cm long, 2-3 mm broad, central, cylindric, solid, faint-orangish, fleshy, smooth.

Hypal system: Monomitic with thin walled generative hyphae, septa usually with clamp connections; occasionally laticiferous hyphae present.

Habit: Solitary or in group on humus soil (Pl. 1).

Holotype: Sharma 169123 Borivili National Park, Bombay 22-8-1985 (Cryptogamic unit, BSI, Howrah).

Paratype: Pradhan 169124 *Ibid.* 11-9-1986 (BSI).

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REFERENCES

- SINGER, R. Agaricales in Modern Taxonomy. J. Cramer Publ. pp. 912 + VI, pl. 84. 1975.
SMITH, A.H. AND L.R. HESLER. Studies in North American species of *Hygrophorus*. *Lloydia* 5:1-94. 1942.
WAKEFIELD, O.B.E. AND R.W.G. DENNIS. Common British Fungi. Saigo Publishing Co. Ltd., England p.p. 211. 1981.