

TABLE I

Measurements of somatic chromosomes of *F. gigantea* at metaphase

Chromosome type	Chromosome number	Long arm (l) in $\mu\text{m}$	Short arm (s) in $\mu\text{m}$	Total length (c) in $\mu\text{m}$	Arm ratio (r)	Centromeric index (i)	Chromosome nomenclature
A	1-4	5.34	1.33	6.67	4.02	19.94	st
E	5, 6	5.67	0.67	6.34	8.32	10.57	t
C	7, 8	5.00	1.00	6.00	5.00	16.67	st
D	9, 10	5.00	0.67	5.67	7.46	11.82	t
E	11, 12	3.33	1.00	4.33	3.33	23.09	st
F	13, 14	1.67	1.67	3.34	1.00	50.00	M
G	15-20	1.33	1.33	2.66	1.00	50.00	M
H	21-24	1.33	1.00	2.33	1.33	42.91	m
I	25-28	0.83	0.83	1.66	1.00	50.00	M
J	29-34	0.66	0.66	1.32	1.00	50.00	M

$$c = l + s; r = l/s; i = 100 s/c.$$

*Furcraea*, by fragmentation of the long chromosomes and the medium chromosomes. The somatic chromosome number of  $2n=34$  reported here is new to the genus *Furcraea*.

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### GLIOCLADIUM AGRAWALII: A NEW KERATINOPHILIC MOLD

DURING a survey for Keratinophilic fungi and related dermatophytes from soils<sup>1</sup> one new mold was isolated from decomposing buffalo horn pieces from animal house floor sweepings and described here. On preliminary examination this showed keratinolytic activity when tested by a method of Agarwal and Kushwaha<sup>2</sup>

*Gliocladium agrawalii* sp. nov. (Fig. 1).

Coloniae albae, maturae zonis rubellis notatae. Mycelium ramosum, septatum. Conidiophori hyalini erecti, septati, interdum irregulariter ramosi, 15.2-178.44  $\times$  1.4-284  $\mu$ , phialides 2-4, vulgo 3, in verticillis producentes graciles, hyalinas, 19.6-30.8  $\mu$  longas, ad basim 2.8-4.2  $\mu$  latas, apicibus acutis, Conidia elliptica in phialidum apicibus producta, hyalina, tenuiter tunicata, 2.8-7.0  $\times$  1.4-2.8  $\mu$ , in capitulis globosis gelatinosis cumulata 8.4-22.0  $\mu$  diametro.

Colonies white, on maturity showed pink zones, mycelium branched irregularly 15.2-178.4  $\mu$ . Conidiophores give rise 2-4 phialides, generally 3 in verticills, slender, hyaline, 19.6-30.8  $\mu$  long and 2.8-4.2  $\mu$  broad at the base with pointed tips. Conidia elliptical borne apically on the phialides, hyaline, thin-walled,

2.8-7.0  $\mu$   $\times$  1.4-2.8  $\mu$  in a globose gelatinous conidial heads, 8.4-22.0  $\mu$  in diameter.

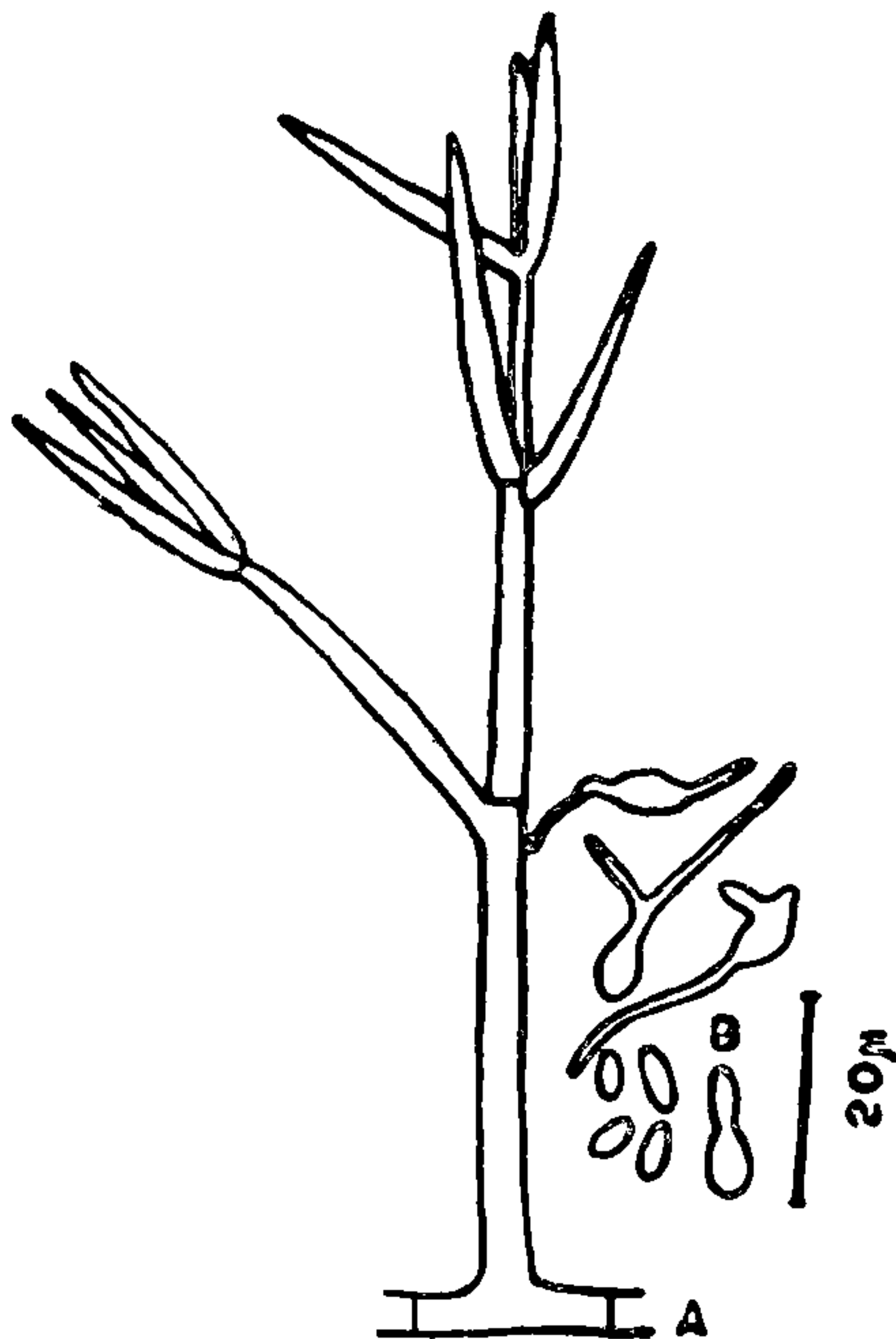


FIG. 1

This fungus does not resemble with any of the known species<sup>3,4</sup>. The colony colour of this isolate resembles with *G. roseum* only in its initial stage. The typical flask shaped phialides and chain of conidia of *G. roseum* are not found in the present isolate. White colored colonies also resemble with *G. penicilloides* but the present isolate differs in shape of phialides and size of conidia.

As these features do not fit into any of the described species, it is described here as a new species and named in the honour of Dr. S. C. Agarwal. The living cultures are deposited at CMI, Kew (IMI 179846) and at Mycological Collection of Botany Department of University of Saugar (SU/KU 128).

The fungus grows well on Sabouraud's dextrose agar at 28°C. This fungus showed 25.7% weight loss of peacock feathers, 190  $\mu$ g/ml protein release from feather and 78 KU/ml keratinolytic activity on feather. This strain also colonizes human hair exhibiting 16.1% weight loss and 118.9 KU/ml keratinolytic activity.

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#### DRECHSLERA COLOCASEAE—A NEW SPECIES

DURING August to October, at Allahabad (India), *Colocasia esculenta* was found to suffer from a leaf spot disease. The disease manifested itself as circular spots 0.5 cm-1.5 cm in diam., dirty yellow in colour and sometimes coalescing to form larger patches. As the lesion aged, it dried up, became brittle and ultimately the dead portion of the spot fell from the leaf. About 8-10% of the crop was estimated to be affected by the disease. Repeated isolations from the diseased areas always yielded a species of *Drechslera*. Its pathogenicity was established as Koch's postulates were fully satisfied.

The cultural characteristics of the isolate resembled to some extent that of *D. hawaiiensis*. It differed from the other known species of *Drechslera* (Ellis), therefore, it is being reported as a new species. Its latin diagnosis is given below :

*Drechslera colocaseae* sp. nov. Tandon et Bhargava

Coloniae in medio Asthana and Hawker's "A" dicto cultae, effusae, primum albae, postea intense olivaceo-griseae factae, stromata nulla. Hyphae olivaceo-griseae, leves, septatae, 1-4.4  $\mu$ m crass, septis distantibus inter se 13.2-19.8-22.0  $\mu$ m. Conidiophora solitaria, geniculata, septata, olivaceo-grisea ad intense olivaceo-grisea, 17.6  $\mu$ m-132.0  $\mu$ m long., et 4.4  $\mu$ m crass., 2-4 conidia ferentia. Conidia recta, oblonga, ad extrema rotundata, hyalina dum iuvena, virida "vetiver" dum matura, 3-7 (plerumque 5-) pseudoseptata, 19.8  $\mu$ m-26.4  $\mu$ m-30.8  $\mu$ m-36.0  $\mu$ m-39.6  $\mu$ m (36.0  $\mu$ m)  $\times$  4.4  $\mu$ m-8.8  $\mu$ m (6.6  $\mu$ m).

Specimen e Praedio Experimentali Departmenti Botanici Universitatis Allahabad, Allahabad (India) collectum.