

ACREMONIUM GAMSII NOV. SP. (HYPHOMYCETES)

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INTRODUCTION

In the course of a study of the mycoflora in the recently reclaimed polder Zuidelijk Flevoland (Netherlands) a hyphomycete was isolated characterized by sporogenous cells borne singly either directly on the vegetative hyphae or less often in groups of two or three on very short conidiophores with one-celled hyaline conidia bundled in heads. According to these characteristics it has to be classified within the genus *Acremonium*.

GAMS (1971) in his monograph of *Cephalosporium*-like hyphomycetes treated 82 species but as the fungus concerned could not be identified with any of these, it was considered as new.

Acremonium gamsii Tichelaar nov.sp.

Coloniae in agaro malti lente crescunt, 17–19 mm post 10 dies 20°C, albae deinde sub-roseae, floccosae, medio caespitosae, ad marginem plus minusve zonatae, circumscriptione irregulari, reverso luteo deinde medio olivaceo nigro. Mycelium septatum, hyphis hyalinis, 1–1,7 μ crassis, in culturis vetustioribus inflationibus intercalariibus vel terminalibus praeditis. Conidiophora plerumque orthophialides tenuitunicatae, leves, nonnumquam septata, 7,5–25 μ longa e 2–2,5 μ ad 0,5 μ attenuata, parte apicali saepe curvata, collari cylindraceo terminata. Conidia capitulis mucidis fasciculata, hyalina, continua, levia, bacilliformia vel minime fusiformia, saepe modice curva, utrinque truncata (4–)5–7(–12) μ \times 0,5–1 μ . Chlamydo sporae absunt.

Habitat in terra, sub vegetatione Phragmitis australis. Typus CBS 726.71 vivus et exsiccatus in Centraal Bureau voor Schimmelcultures, Baarn praeservatus.

Colonies on malt agar slowly growing, attaining a diameter of 17–19 mm in 10 days at 20°C, lightly zonate in marginal area, margin abrupt, irregular in outline. Mycelium floccose with central area tufted, heavily sporulating white at first, becoming pinkish. Reverse yellowish becoming greenish-black in central area with age. Hyphae nematogenous, hyaline, septate, 1–1,7 μ in diameter with intercalary and terminal swellings in older cultures. Conidiophores mostly consisting of solitary orthophialides, thin-walled, smooth, not chromophilic, sometimes two-celled with base 2–2,5 μ in diameter, varying in length from 7,5 to 25 μ , slowly tapering to 0,5 μ with tips straight or more often bent, terminating in small cylindrical collarettes. Conidia tending to become bundled in elongating heads, one-celled, hyaline, smooth-walled, bacilliform to slightly fusiform, often slightly bent with truncate ends, (4–)5–7(–12) \times 0,5–1 μ , not chromophilic. Chlamydo spores absent.

Colonies on Sabouraud-agar fairly rapidly growing, attaining a diameter of

30 mm in 10 days at 20°C, margin abrupt, regularly circular, floccose with central area raised, white becoming pinkish. Reverse yellowish-brown.

Isolated from soil, Zuidelijk Flevoland, Netherlands, under *Phragmites australis*.

Type material in CBS no. 726.71.

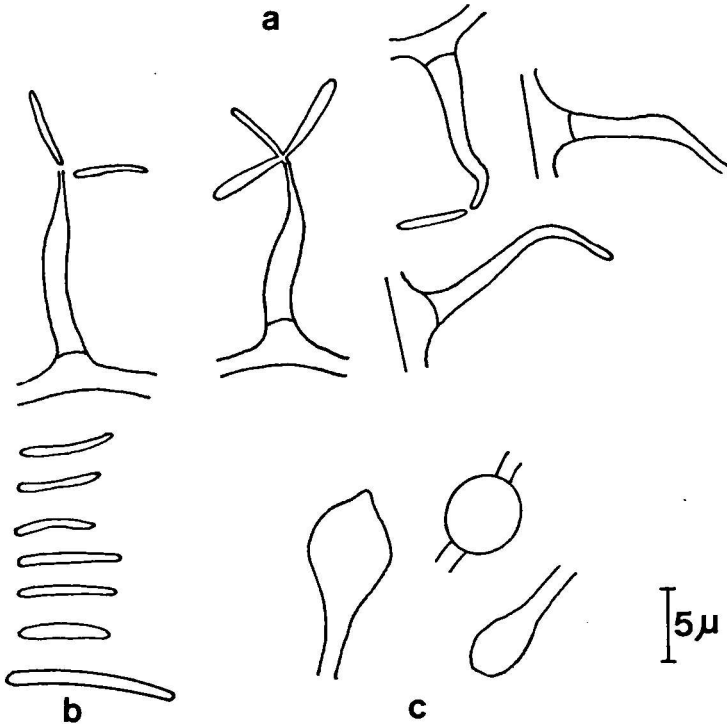


Fig. 1. *Acremonium gamsii*. a. phialides, b. conidia, c. mycelial swellings.

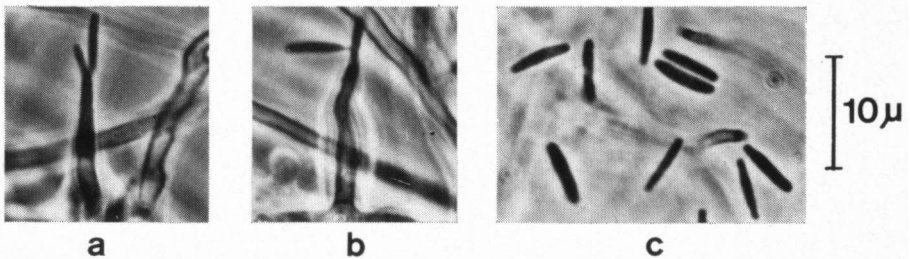


Plate 1. *Acremonium gamsii*. a. and b. phialides, c. conidia (phase contrast).

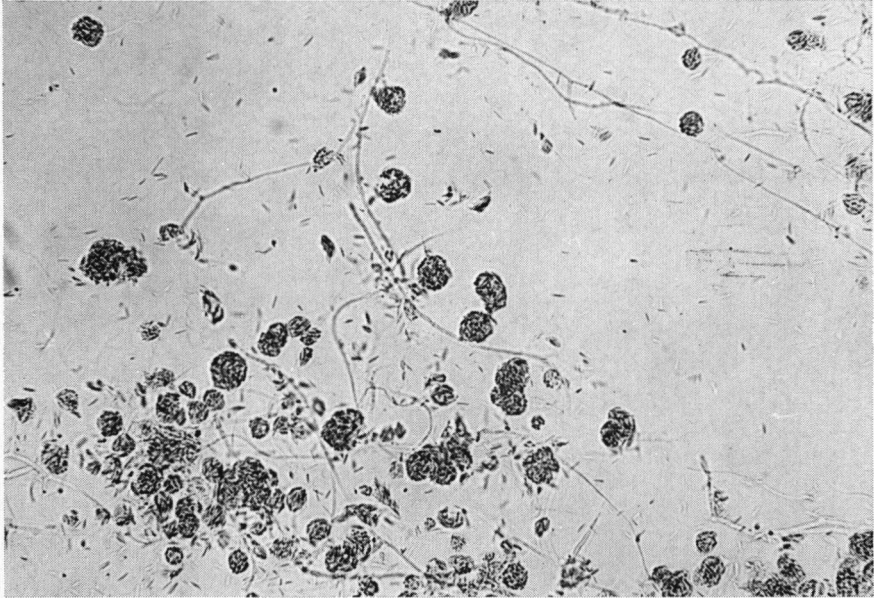


Plate 2. *Acremonium gamsii*. habit $\times 300$.

The species resembles *Acremonium bacillisporum* (GAMS 1971) but differs by the size and shape of the conidia and the way the conidia tend to bundle in heads. In cultures of *A. gamsii* no perfect state has yet been found.

The species is named in honour of Dr. W. Gams, CBS, Baarn, the Netherlands, monographer of the genus *Acremonium*.

ACKNOWLEDGMENT

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REFERENCES

GAMS, W. (1971): *Cephalosporium-artige Schimmelpilze (Hyphomycetes)*. Gustav Fischer Verlag, Stuttgart.