# A New Species of the Genus *Euphoriomyces* (Laboulbeniales Ascomycotina) Collected in Korea

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One new species of the genus *Euphoriomyces* was collected on *Scaphisoma rufum* Achard (Scaphidiidae) in South Korea. *Euphoriomyces chaekyui* sp. nov. is unique in having a single terminal phialide shaped an elongated cylindrical form on the distal portion of the main axis.

KEYWORDS: Euphoriomyces, Euphoriomyces chaekyui, Laboulbeniales, South Korea

So far 15 species of the genus *Euphoriomyces* have been described [1-9]. In this paper, one new species of the genus *Euphoriomyces* from Korea is reported and described. This new *Euphoriomyces* species does not appear to be closely related to any of the described species.

# Euphoriomyces chaekyui Yongbo Lee et Younghee Na, sp. nov.

Thallus hyaline luteolus. Longitudo totaliter usque ad caputem perithecii 68~70 μm. Receptaculum consistens ex parte inferiore et superior (axis centrum). Pars inferior consistens ex cellulae superpositae tres. Cellula I paulatim ad pedes cuneata, ad superiorem partem paulatim latia. Cellula II isodiamaetrica, bis dimidium ad ter latia quam longitudo. Cellula III maxima et latissima. Ter latia lamina tres et septima consistens ex cellulae duae, continens phialidum terminalum. Existima prolongata cylindrica forma ex superiore parte axis centri. Una parts perthecii consistens ex laminae tres receptacli inferioris, consistens ex thyrsa cellula et perithecia. Thyrsa cellula inperiora subiaceans, caput latia, amplia quma latia. Perithecium  $9 \times 6 \mu m$  quam ova porlongatum.  $39 \times 14 \mu m$  focus subabicale parte proximus. Una parte antheridii consistens ex receptaculae inferiore, consistens ex thyrsa cellula et antheridium originale. Thyrsa cellula inflata, crassia et minora quam perithecium et superiorae receptaculae (axis centrum). 4 × 4 µm. Antheridium originale lagona adumbratim. Apex externus flexus. 12~18 × 3~6 µm. Ascospores  $22 \times 2.5 \mu m$ .

**Holotypus.** In *Scaphisoma rufum* Achard (Scaphidiidae, Coleoptera), Hoaeomsa, Mt. Jiri, Guryeo-gun, Jeonnam Province proxime, July 20, 1998, L-Y-2011-1 in herbario

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Thallus hyaline yellowish. Total length to the top of perithecium  $68\sim70~\mu m$ . Receptacle consists of the basal and distal portions (main axes),  $51\times12\sim12\times18~\mu m$ ; basal portion composed of three superposed cells,  $15\sim20\times12\sim18~\mu m$ ; cell I tapering gradually towards the foot, gradually becoming broader towards the distal portion; cell II isodiametric, about  $2.5\sim3$  times broader than long; cell III larger and broader than the others, over three times broader than long; distal portion (main axes) composed of 7 layers, the third and fourth layers consist of two cells, bearing a terminal phialide shaped an elongated cylindrical form on the distal portion of main axes,  $36\sim69\times7\sim10~\mu m$ .

Perithecia bearing on one side of the third layer of the basal receptacle, composed of the stalk cell and the perithecium proper; stalk cell narrower below and broader above, longer than broad,  $9\times6~\mu m$ ; the perithecium proper elongated ovate,  $39\times14~\mu m$ , with distinct projection near the subapical portion.

Antheridium bearing on one side of the basal receptacle, composed of the stalk cell and the antheridium proper; stalk cell inflated, stouter and smaller than those of the perithecium and the distal receptacle (main axes),  $4 \times 4 \mu m$ ; antheridium proper elongated flask-shaped, the pointed apex bent externally,  $12{\sim}18 \times 3{\sim}6 \mu m$ . The ascospores  $22 \times 2.5 \mu m$ .

Host genus. Scaphisoma (Scaphidiidae, Coleoptera).

Host species. Scaphisoma rufum Achard

**Distribution.** Korea (known only from the type locality).

**Specimens examined.** Near Temple Hoaeom, Mt. Jiri, Guryeo-gun, Jeonnam Province, 20 July, 1998, L-Y-2011-

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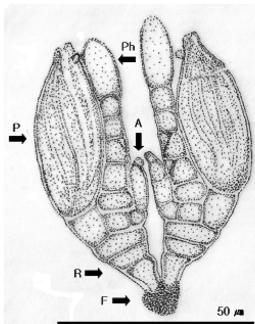


Fig. 1. Euphoriomyces chaekyui Y. B. Lee et Y. H. Na (two individuals) on Scaphisoma rufum Achard. A, antheridium; F, foot; P, perithecium; Ph, phialide; R, receptacle.

## 1 (holotype), 2011-2, 2011-3.

The present species is similar to *E. cybocephali* in general appearance, but it is distinguished from the latter by the distal portion of its receptacle which is composed of seven layers and the terminal phialides [1-9]. This new species is unique in having a single terminal phialide shaped an elongated cylindrical form on the distal portion of the main axis (receptacle) (Fig. 1).

This species was a parasite on *Scaphisoma rufum* Achard (Scaphidiidae, Coleoptera). Thalli occurred on pronotum, elytra, abdomen and sternites of host insects. The specific epithet was chosen after Dr. Chaekyu Lim, Prisident of Koguryeo College, who collected this fungus together with the authors.

### Acknowledgements

This study was partially supported by Chosun University in 2009. The authors wish to extend their special thanks to Dr. Reinhold Rauh, Professor of the German Language Department, in the College Foreign Languages division of Chosun University, for revising the Latin descriptions.

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