

A New Species of the Genus *Coreomyces* (Laboulbeniales Ascomycotina) Collected from the Island of Java, Indonesia

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(Received November 2, 2009. Accepted December 14, 2009)

One new species of the genus *Coreomyces* was collected on *Micronecta sedula* from the island of Java; *C. javanicus* sp. nov. is very similar to and apparently closely related to *C. corixae*. This species is characterized by a receptacle that is bent towards one side with cell I, nearly rounded. The length of cell I is equal to that of cell II and the perithecia are longitudinal, elliptical or cylindrical. Thalli consistently occurred on the margin of the left elytron of the hosts.

KEYWORDS : *Coreomyces*, *Coreomyces javanicus*, Island of Java, Laboulbeniales

Twenty species of the genus *Coreomyces* parasitize representatives of the Corixidae (Hemiptera). They have been detected on every continent except Australia (Majewski, 1994; Tavares, 1985). The authors described erroneously one species as *C. corixae* from Java, Indonesia (Lee *et al.*, 2008); in fact, these representatives were a new species of *C. javanicus* thalli.

Coreomyces javanicus Y.B. Lee et Y.H. Na, sp. nov.

Thallus 235–250 μm longus ad apicem perithecii, paene rectus vel subcurvus, hyalinus et subflavus brunneus. Receptaculum constans ex tres cellulae superpositae et duae usque tres cellulae appendiculatae, 110–131 \times 20–25 μm . Cellula I plus robusta, pars inferiore rotundatum, longitudo 1.8 magnus qua amplitudo, 38–45 \times 20–25 μm ; cellula II longitudis cellula I idem, plus angusta, 38–45 \times 16–20 μm ; cellula III longitudis et amplitudis idem vel sublonga, isodiametrica, 20–25 \times 18–20 μm . Cellulae appendiculatae 2–3, amplitudo paene 3–4 magnus qua longitudo. Ramuli steriles, subtile ramificati. Ramuli antheridiali simpli, rare evoluti.

Perithecium constans ex cellula caulicula et perithecium realum; cellula caulicula longitudis cellula III idem, 20–25 \times 15–18 μm ; perithecium realum paene rectum; medias partes paene inflatae, obscurus subflavus brunneus, attenuatum ad apicis, una pars apicis subcurvus, 90–100 \times 18–29 μm .

Holotypus: In *Micronecta sedula* Horvath (Corixidae, Hemiptera), Jakarta, Java, Indonesia, September 22, 2006, L-Y-2214 in herbario Lee Yongboi in Universitati Chosunae.

Thallus nearly straight or slightly bent, hyaline, yellowish-brown. Total length to the top of the perithecium 235–

250 μm . Receptacle consists of three superposed cells and 110–131 \times 2–3 appendiculate cells, 20–25 μm ; cell I stouter, rounded below and approximately 1.8 times longer than wide, 38–45 \times 20–25 μm ; cell II as long as cell I, narrower, 38–45 \times 16–20 μm ; cell III as long as broad or slightly longer, isodiametric, 20–25 \times 18–20 μm .

Appendiculate cells 2–3 in number, about 3–4 times broader than the length. The sterile branchlets, thin ramified, 150–160 μm long. Antheridial branchlets simple, nearly seldom developed.

The perithecium composed of the stalk cell and the perithecium proper; the stalk cell as long as the cell III, 20–25 \times 15–18 μm ; the perithecium proper usually nearly straight, slightly inflated in the middle portion, darker yellowish-brown, tapering gradually to the apex, the apex slightly bent toward one side, 90–100 \times 18–29 μm .

Host genus: *Micronecta* (Corixidae, Hemiptera).

Host species: *Micronecta sedula* Horvath.

Distribution: Jakarta, Java, Indonesia.

Specimens examined: Cibubur Lake, Cibubur Danau Cibubur, Jakarta, Indonesia, 22 September, 2006, L-Y-2214 (holotype), 2159, 2192-2, 2192-3.

In a paper on Javanese representatives of the genus *Coreomyces* (Lee *et al.*, 2008), the authors described the thalli of this species as *Coreomyces corixae* Thaxter. Currently, after an analysis of a quantity of materials, the thalli described in that paper were shown not to be *C. corixae* Thaxter.

This new species is quite similar to and apparently closely related to *C. corixae* Thaxter; however, it differs in the following features (Fig. 1); 1) The receptacle is slightly bent toward one side in *C. javanicus*, while it is nearly straight in *C. corixae*. 2) Cell I is nearly round in *C. javanicus*, while it is obtriangular or cylindrical tapering gradually toward the basal portion in *C. corixae*. 3)

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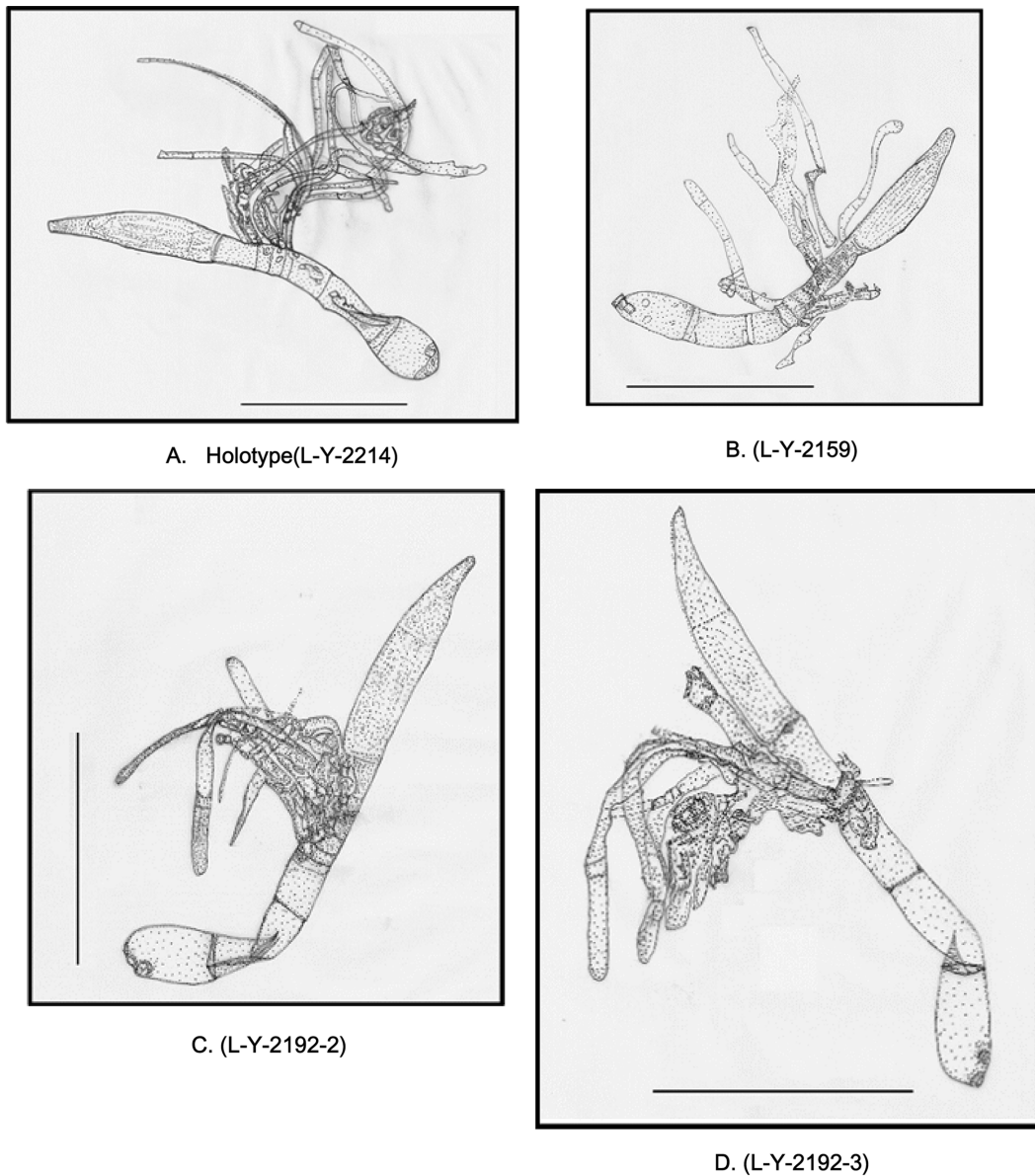


Fig. 1. *Coreomyces javanicus* Y.B. Lee et Y.H. Na on *Micronecta sedula* Horvath. Scale Bar: 100 μ m.

Cell II is as long as cell I in *C. javanicus*, while it is approximately 2 times longer than cell I in *C. corixae*. 4) The perithecium is longitudinal-elliptical or cylindrical in *C. javanicus*, whereas it exhibits evidences an inflated elliptical shape in *C. corixae*. 5) Thalli consistently occurred on the left elytron margin in *C. javanicus*, but are located on the left half of the lower surface of the abdomen in *C. corixae*.

Acknowledgements

This study was partially supported by the financial assistance of Chosun University in 2008. Finally, 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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