

## *Nemania pouzarii*, a new species from Oahu Island, Hawaii

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A new species of *Nemania* is described and named in honor of Dr. Z. Pouzar. It resembles *N. carbonacea*, differing in the shorter ascus stipes, larger ascospores, less fragile and less extensive stromata. Cultures are described. An anamorph is unknown.

**Key words:** pyrenomycetes, Xylariaceae, *Nemania pouzarii* sp. nov.

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Je popsán nový druh rodu *Nemania* na počest Dr. Z. Pouzara. Druh připomíná *Nemania carbonacea*, ale liší se kratší stopkou vřevka, většími askosporami, méně křehkými a drobnějšími stromaty. Jsou popsány také čisté kultury. Anamorfa je dosud neznámá.

A *Nemania* collection from the Island of Oahu, Hawaii, USA is here described as new. This taxon was collected during an expedition to obtain material for a treatment of the pyrenomycetes of the Hawaiian Islands, with initial emphasis on family Xylariaceae. It is a distinct pleasure to name this *Nemania* in honor of our colleague, Z. Pouzar. Dr. Pouzar was the first investigator to utilize *Nemania* S. F. Gray for a group of xylariaceous fungi that had previously been considered as *Hypoxyton* (Miller, 1961; Petrini and Rogers, 1986; Pouzar, 1985a, 1985b). Moreover, it is noteworthy that Dr. Pouzar is a highly versatile mycologist, an authority on Basidiomycetes as well as on Ascomycetes. He is highly respected among his colleagues for the acuteness of his observations and his taxonomic acumen. He is truly a giant among mycologists!

*Nemania pouzarii* J. D. Rogers et Y.-M. Ju, sp. nov. Figs. 1–6

Stromata mammiformia cum basi lata, plerumque 2 vel aliquot aggregata, 1–3 mm diam; externe nigra; textura sub superficie carbonacea; textura inter perithecia molli albida sparsa praedita. Perithecia plus minusve globosa, 0.5–0.8 mm

diam. Ostiola papillata. Asci 110–120  $\mu\text{m}$  longitudine tota  $\times$  8–10.5  $\mu\text{m}$  crassi, partibus sporiferis ca. 80  $\mu\text{m}$  longitudine, stipitibus 30–40  $\mu\text{m}$  longitudine, annulo apicali in liquore iodato Melzeri cyanescente, subcylindrici, 3  $\mu\text{m}$  alto, 2.5  $\mu\text{m}$  lato. Ascosporeae brunneae, unicellulares, ellipsoideae vel ellipsoideo-inequilaterales plerumque apicibus angustatis, leves, (12–)13.5–15  $\times$  (5–)6.5–7.5  $\mu\text{m}$ , rima germinativa longa recta praeditae. Paraphyses abundae.

Stromata mammiform with broad base, usually 2 or more aggregated, 1–3 mm diam; surface black; tissue beneath surface carbonaceous; tissue between perithecia soft whitish sparse. Perithecia more or less globose, 0.5–0.8 mm diam. Ostioles papillate. Asci 110–120  $\mu\text{m}$  total length  $\times$  8–10.5  $\mu\text{m}$ , the spore-bearing part ca. 80  $\mu\text{m}$  long, the stipes 30–40  $\mu\text{m}$  long, with apical ring bluing in Melzer's iodine reagent, subcylindrical, 3  $\mu\text{m}$  high, 2–5  $\mu\text{m}$  broad. Ascospores brown, one-celled, ellipsoidal or ellipsoid-inequilateral, usually with narrow ends, smooth, (12–)13.5–15  $\times$  (5–)6.5–7.5  $\mu\text{m}$ , with germ slit long and straight. Paraphyses abundant. Anamorph unknown.

Specimen examined: USA: Hawaii, Island of Oahu, Judd Trail, on decayed wood, J. D. Rogers, 3 Jan. 2001 (HOLOTYPE, BISH; ISOTYPE, WSP70285). Culture deposited in American Type Culture Collection.

All cultures incubated at ca. 20C under natural cycle of daylight and darkness on various media in 9 cm diam Petri plates.

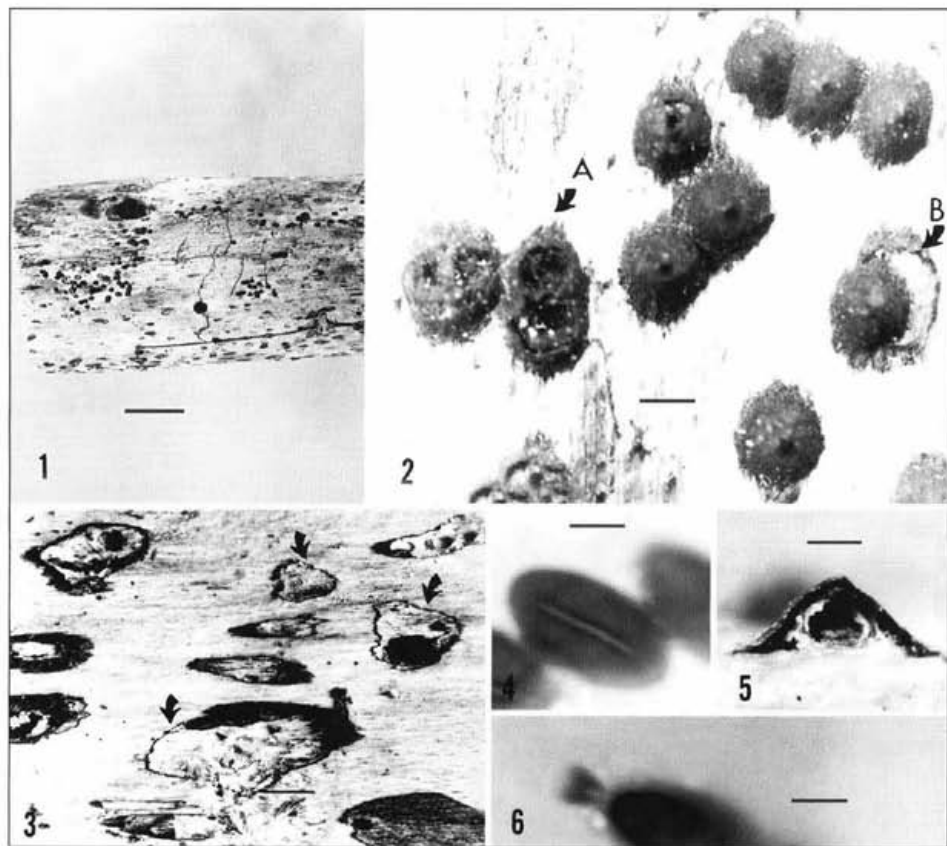
Colony on 2% Difco Malt Extract covering 6 cm diam of Petri plate in 6 wk, appressed, white, forming distinct concentric zones. Reverse orange, brightest toward center of plate. No sporulation noted.

Colony on 2% Difco Oatmeal agar covering 7 cm diam of Petri plate in 6 wk, dense, white with trace of concentric zones. Reverse slightly purplish. No sporulation noted.

Colony on SME agar (Kenerley and Rogers, 1976) covering Petri plate in 4 wk, appressed, thin, white. Reverse uncolored. No sporulation noted.

Culture deposited in American Type Culture Collection.

*Nemania pouzarii* resembles *N. carbonacea* Pouzar in general morphology (Granmo et al., 1999). It differs in the slightly longer ascospores, the asci with short stipes, and the much less widespreading and the rather hard nonfragile stromata. *Nemania pouzarii* stromata occur in discrete spots on highly decayed wood that are bounded by black zone lines. Unlike most cultured *Nemania* species it did not produce an anamorph on SME medium or on the other media tested. *Nemania carbonacea* has apparently not been cultured (Granmo et al., 1999; Ju and Rogers, 2002) and, thus, a cultural comparison could not be made.



Figs. 1-6. *Nemanium pouzarii*. 1. Habit of stromata on host. 2. Habit of stroma on host. Figure is oriented perpendicular to Fig. 1. Stroma at A has been cut to expose perithecia. Stroma at B has been partially dislodged and shows scar on host. 3. Host surface with scars indicating former attachment sites of stromata. Arrows indicate especially conspicuous zone lines. 4. Ascospore with germ slit, the full length not shown owing to curvature of spore. 5. Longitudinal cut through stroma exposing perithecium and remains of surrounding white tissue. 6. Ascus apical ring with ascospore impinging on the base.

Figs. 1-3, 5 by photomicrography. Figs. 4 and 6 by bright field microscopy. Fig. 4 from water mount. Fig. 6 from Melzer's iodine mount. Fig. 1 bar = 3 cm; figs. 2 and 3 bar = 0.6 mm; figs. 4 and 6 bar = 4.5  $\mu$ m; fig. 5 bar = 0.3 mm.

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