

***Didymium melanospermum* (Pers.) T. Macbr. SM24 (= PDD 110404), SM25 (= PDD 110405) & SM73 (= PDD 110446) – All 3 collections matching Steve Stephenson’s description and illustrations, pages 161–162 in his 2003 book on Myxomycetes of New Zealand.**

Collection dates: SM24 - 6 April 2005 & **SM25** - 5 April 2005 while attending the 19th Annual Fungal Foray centered in Ohakune; **SM73** - 19 May 2015 while attending the 29th Annual Fungal Foray centered at Sixtus Lodge in Apiti

Substrates & collection sites: SM24 among dead bryophytes on downed dead wood ; in the Rangataua Forest and Ecological Area, site #10 on Nick’s list of sites for the Ohakune Foray. Nick is the DOC worker who helped plan much of the foray. Site #10 is described by Nick as follows: Rangataua Forest is largely a mixed beech forest (red, silver and mountain) with occasional rimu, Hall’s totara and miro. Parts of this forest have been logged. This forest is situated on the largest lava flow in New Zealand, the “Rangataua lava flow” which can easily be seen from the main highway. Access is via the Rotokura Ecological Area track around the lakes, or along Rangataua Road. **SM25** on a downed, brownish dead leaf; at Nick’s Site #1 - the Erua scarp and Waimarino River terraces which he describes as follows: The steep ridge running up from the Waimarino River designates a fault scarp. This area is floristically rich and has several rare and uncommon plants present, as well as uncommon forest types, especially on the river terrace. It is a priority site for threatened plant management. The forest here is dominated by matai, mountain celery pine, pink pine, silver pine and some mountain cedar, with pokaka and many species of divaricating shrubs. Areas of wetland and shrubland are also present. The easiest access to the river terrace forest is from the top of the scarp immediately east of Erua Road. **SM73** on a dead, downed, unidentified tree branch roughly 3 cm in diameter; along the hiking track at the end of Renfrew Road, Ruahine beech forest

Collectors: SM24 - Dan Mahoney; SM25 & SM73 - Ann Bell

Identifier: SM24, SM25, SM73 - Dan Mahoney

Voucher materials: Dried herbarium collections accompanied by Shear’s mounting fluid (SMF) semi-permanent slide mounts; colored, digitized, dissecting-scope in-situ photos of fruiting bodies and compound scope digital photos from slide-mounted spores, capillitium and peridia; Dan’s brief comments

Brief comments: Most obvious were the short, stout blackish sporangiophores that supported robust subglobose to subglobose-depressed sporangia. Sporangia were deeply umbilicate beneath with a persistent black peridium mostly covered with crowded but separate clusters of stellate lime crystals. Peridium composed of variously shaped brownish ‘plaques’ – “firm, dull brown or black” in Stephenson’s description. Capillitial threads numerous, dark, narrow, simple to sparingly branched, often zig-zag and often with dark nodular swellings. Spores purple brown, globose, spinulose, 10–12 µm in diameter.

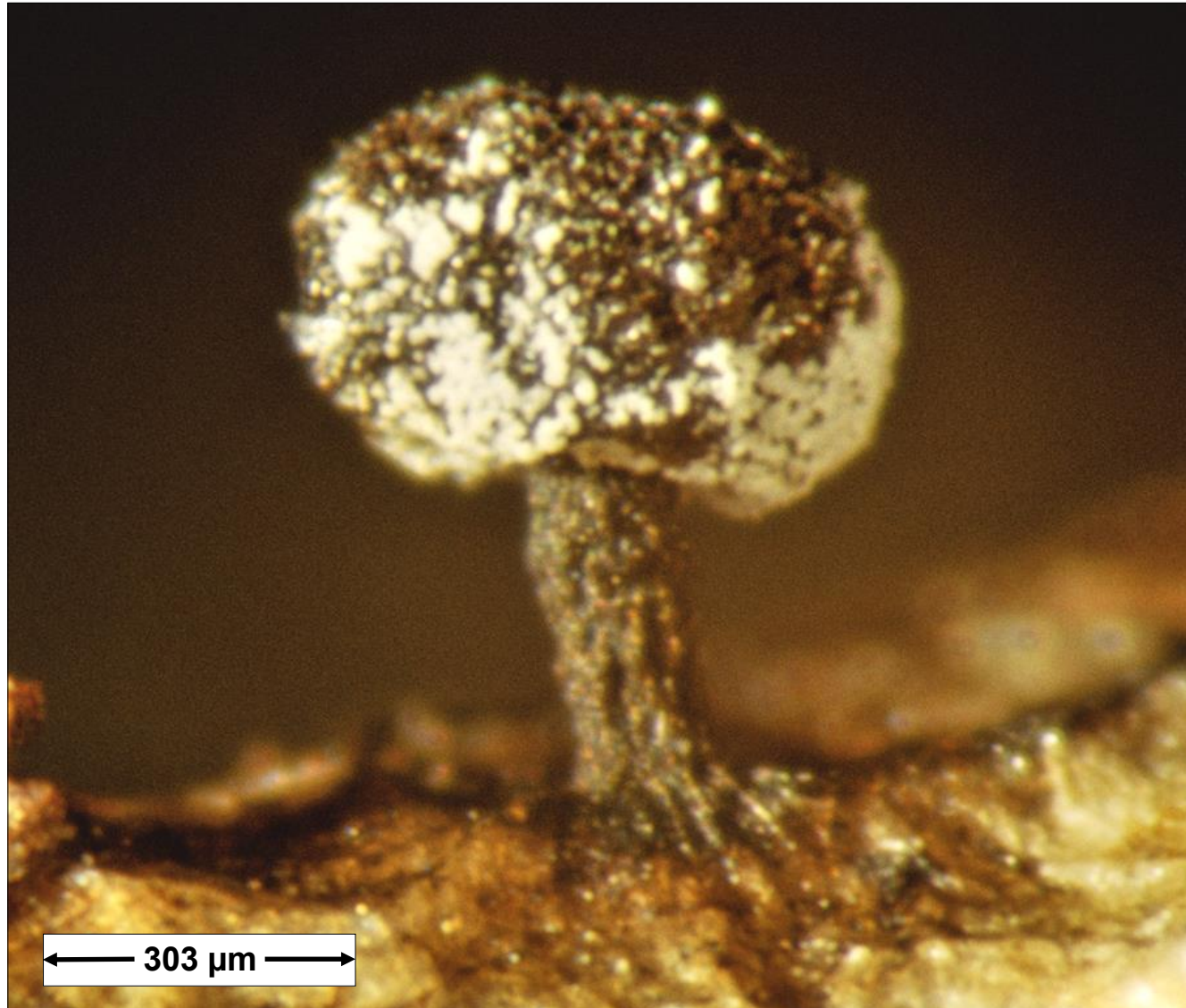


Collection SM24 (= PDD 110404). Fruiting bodies in-situ among dead bryophytes on downed dead wood from the Rangataua Forest and Ecological Area, Ohakune, 6 April 2005 during the 19th Annual New Zealand Fungal Foray. Note that the crystalline lime-covered sporangia are deeply umbilicate beneath – arrowed.

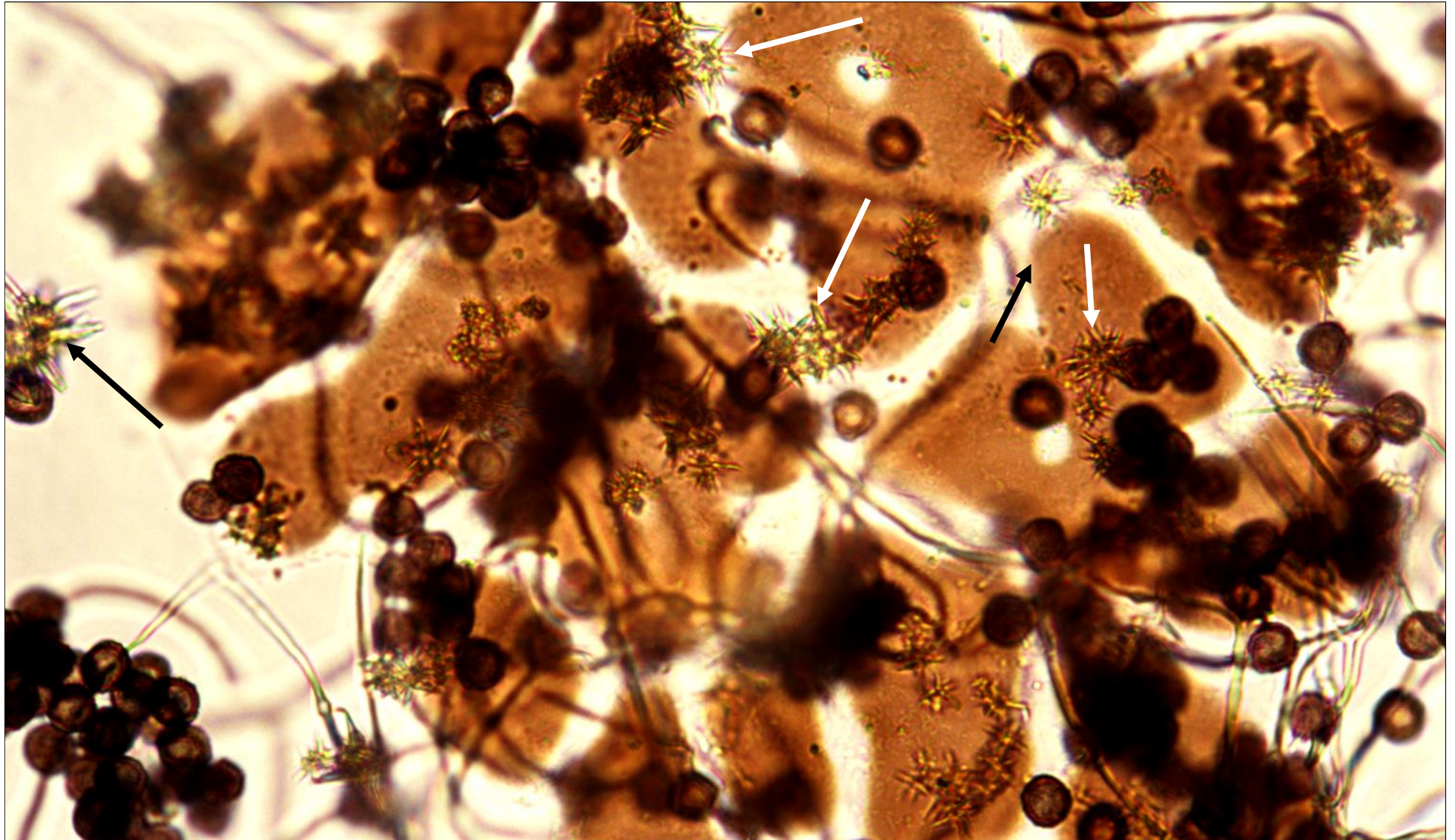


Close-up of two sporangia from the left portion of the photo on the previous page.

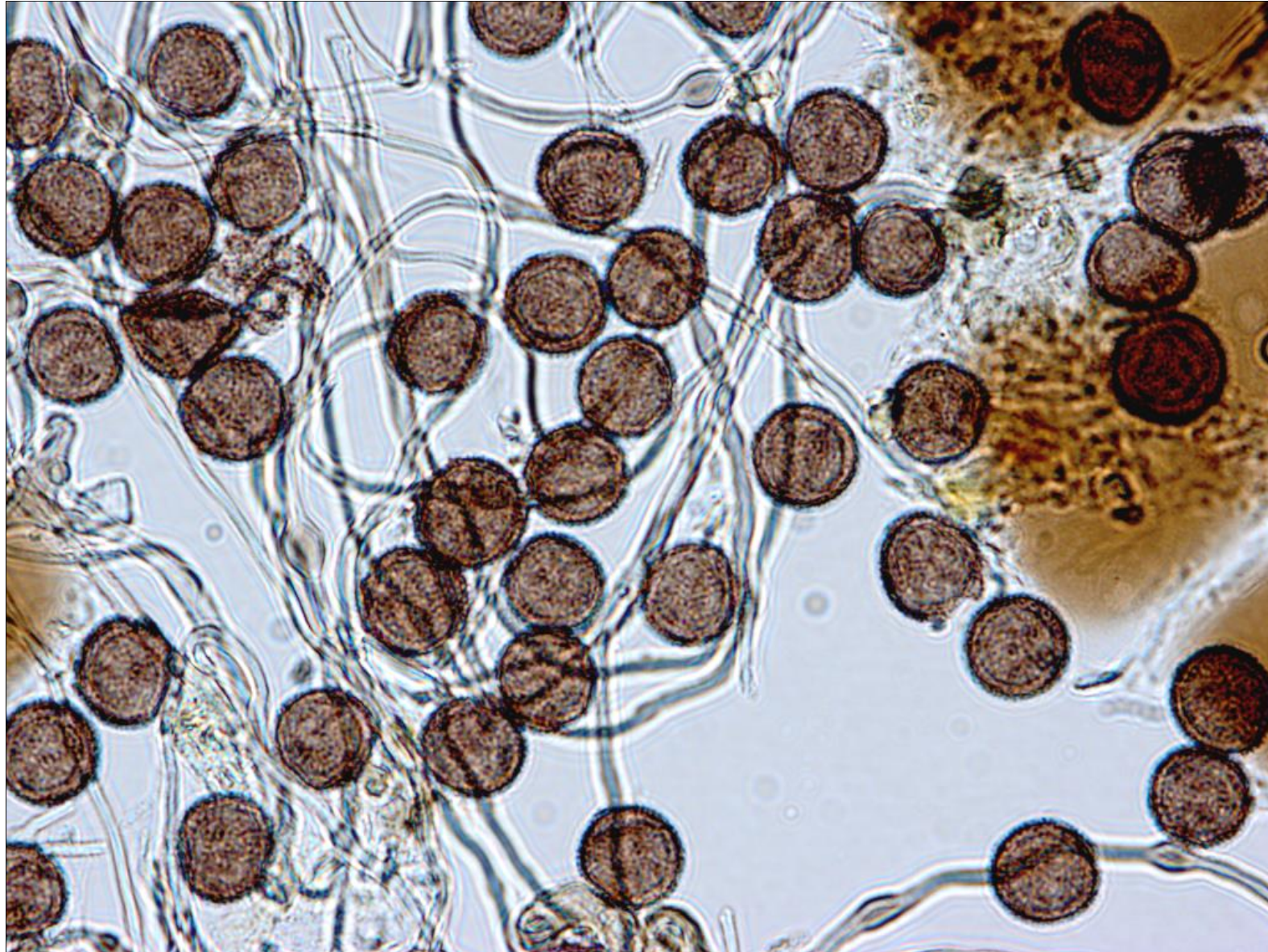
← 400 µm →



Collection SM25 (= PDD 110405). One fruiting body in-situ on a downed, brownish dead leaf from the Erua scarp and Waimarino River terraces north of Ohakune, 5 April 2005 during the 19th Annual New Zealand Fungal Foray.



Collection SM25 (= PDD 110405). Globose spinulose purple brown spores, light brown fragments of the peridium (in the background) and arrowed clusters of stellate lime crystals. SMF slide mount, X40 objective, brightfield microscopy.



**Collection SM73
(= PDD 110446).
Capillitial threads,
globose spinulose
purple brown
spores and light
brown fragments
of the peridium
(the latter, far
right). Water slide
mount, X100 ob-
jective, brightfield
microscopy.**



Collection SM73 (= PDD 110446). Capillitial threads & globose spinulose purple brown spores. Arrows indicate nodular swellings of the capillitial threads. Water slide mount, X100 objective, brightfield microscopy.



**Collection SM73 (= PDD 110446).
Emphasis on purple brown, glo-
bose, spinulose spores, 10–12
µm in diameter. Water slide
mount, X100 objective, bright-
field microscopy.**