Metatrichia floriformis (Schwein.) Nann.-Bremek. SM79

**Collected:** 4 October 2016 on moist dead wood

**Collection site:** Rimutaka Forest Park – Five Mile Loop Track through beech forest in the lower reaches of Graces Stream

**Collected by:** Ann Bell

**Identified by:** Dan Mahoney

**Voucher materials:** Dried herbarium specimen (SM79) and 2 SMF slides; in situ photos of fruiting bodies under the Zeiss dissecting scope and digital photos of microscopic detail; Dan’s brief comments

**Dan’s brief comments:** See Stephenson’s 2003 Myxomycetes of New Zealand.

**Fruiting bodies** numerous, well formed at the time of collection but not dehiscent, sporangia black smooth & glossy, mostly single-stalked (some sporangia with 2-3 sporangia on fused stalks), with a red-brown surface 'hypothallus' present beneath all of the fruiting bodies; after incubation for several days in the ventilated collection box at the lab, sporangia dehiscent with orange-brown capillitial/spore masses expanding through the cracking peridia. The collection was dried and fumigated at this point so the floriform appearance seen earlier in the overly mature collection SM50 wasn’t apparent. **Capillitium** consisting of numerous golden brown unbranched elaters of various lengths (roughly 5 µm wide at the widest point), each spirally ornamented. **Spores** globose, light yellow brown by transmitted light and evenly verruculose, (10–)11–14(–16) µm (Stephenson describes the spores as “bright orange in mass, pale red by transmitted light, densely and minutely spiny, 10–12 µm in diameter”). The difference between verruculose and minutely spiny I find difficult to distinguish – perhaps made clearer in a SEM.

**Earlier collections:**
1. **SM50 (= PDD 110423)** - Substrate: wet, soil/old decaying wood; Collection site: Rimutaka Forest Park, Orongorongo Valley track; Collection date: 4 January 2007; Collector and identifier: Dan Mahoney
2. **SM11 (= PDD 110391)** - Substrate: beech wood, probably silver beech; Collection site: At the beginning of Blyth Track, approx. 7 km up Ohakune Mountain Road, Ohakune; Collection date: 28 October 2002; Collectors: Toni and Pamela Atkinson; Identified by: Dan Mahoney
Metatrichia floriformis. In situ fresh immature fruiting bodies on dead wood.
*Metatrichia floriformis*. In situ fresh immature fruiting bodies on dead wood.
Metatrichia floriformis. In situ fresh immature fruiting bodies on dead wood. Note the fused stalks for these 3 sporangia.
Metatrichia floriformis. In situ mature fruiting bodies on dead wood. Note the dehiscent sporangia and expanding capillitia. Similar field of view as pages 2 and 3 but after several days incubation.
*Metatrichia floriformis*. In situ mature fruiting bodies on dead wood. Note the dehiscent sporangia and expanding capillitia.
*Metatrichia floriformis*. In situ mature fruiting bodies on dead wood. Note the dehiscent sporangia and expanding capillitia.
Metatrichia floriformis elaters. 70% EtOH, 40X objective, brightfield. 5 µm wide (widest point).
Metatrichia floriformis. Spirally ornamented elaters and evenly verruculose spores. 70% EtOH, 100X objective, brightfield.
*Metatrichia floriformis.* Evenly verruculose, globose spores (10–11) 11–14(–16) µm. 70% EtOH, 100X objective, brightfield.