Craterium minutum (Leers) Fr. SM49 (= PDD 110422) – a good match

<u>Collection site:</u> garden area in Otaki (New Zealand)

Collection date: 19 July 2006

Substrate: dead leaf of Griselinia lucida

Collector: Ann Bell; **Identifier:** Dan Mahoney

<u>Voucher materials:</u> Dried herbarium material [SM49 (= PDD 110422)] accompanied by one Shear's mounting fluid (SMF) heated slide mount of one fruiting body; several of Dan's dissecting scope in-situ bird's-eye and side-view photos of the dried fruiting bodies.

<u>Dan's brief description:</u> <u>Fruiting bodies</u> numerous but evenly spaced and not shoulder to shoulder. **Sporangia** appearing as ochraceous (yellow-brown) goblets roughly 0.5–0.75 mm in diameter in bird's eye view (in side view the reddish brown longitudinally wrinkled stalks with their similarly colored slightly spreading bases readily apparent). By the time I viewed the sporangia, nearly all had lost their well-defined white lime-encrusted lids (=opercula). <u>Capillitium</u> with its large angular to subglobose white <u>lime nodes</u> easily seen in overhead view and occasionally the lime was seen concentrated in a middle lower portion of the sporangium as a prominent <u>pseudocolumella</u>. In slide mounts the lime nodes were composed of granular lime and were connected to other lime nodes by hyaline narrow non-limy strands. <u>Spore mass</u> black among the conspicuous lime nodes; in slide mounts individual spores yellow-brown, finely verruculose, globose and 8–10(–11) μm in diameter (occasionally irregular and larger).

<u>Comments:</u> In July 1994, Stephen Whitton found a similar large fruiting of this species at about the same time of year (middle of the New Zealand winter). That collection is also preserved – see PDD online [SM32 (= PDD 110412)]. Perhaps the mid-winter weather conditions in the lower near-coastal N. Island favor its growth and sporulation? Although this species keys relatively close to *Craterium leucocephalum* (Pers. ex J.F. Gmel.) Ditmar, Google internet images leave no doubt as to its identification as *C. minutum*. For me it was important to see these images because nearly all of the "sharply demarcated, preformed (sporangial) lid(s)" [Stephenson, Myxomycetes of New Zealand 2003, p. 176] had already fallen away. All that was left was a very smooth margin on the little goblets, indicative of the sharply delineated lids. According to Stephenson (p. 179), *C. minutum* is the most common species of the genus *Craterium* in New Zealand. *C. leucocephalum* was reported from the Taupo region by the Listers in 1905 but no PDD specimens exist nor did Stephenson find this species in NZ.



In situ partial side views of dried fruiting bodies on a dead *Griselinia* leaf. Note that the sporangial 'lid' is still present on only 1 sporangium (arrowed). This photo and others on the following pages were taken on 20 Sept. 2006.



In situ side views of dried fruiting bodies on a dead *Griselinia* leaf.



In situ bird's eye view of dried sporangia on a dead *Griselinia* leaf. Note that the sporangial 'lid' is still present (or partially present) on only 2 sporangia (arrowed).



In situ bird's eye view of dried sporangia on a dead *Griselinia* leaf. Note that the sporangial 'lid' is still present on only 1 sporangium (arrowed).



In situ overhead view of 2 dried open sporangia on a dead *Griselinia* leaf. The capillitium with its large angular to subglobose white lime nodes (arrowed) is easily seen in this close-up view. The spore mass is nearly black.