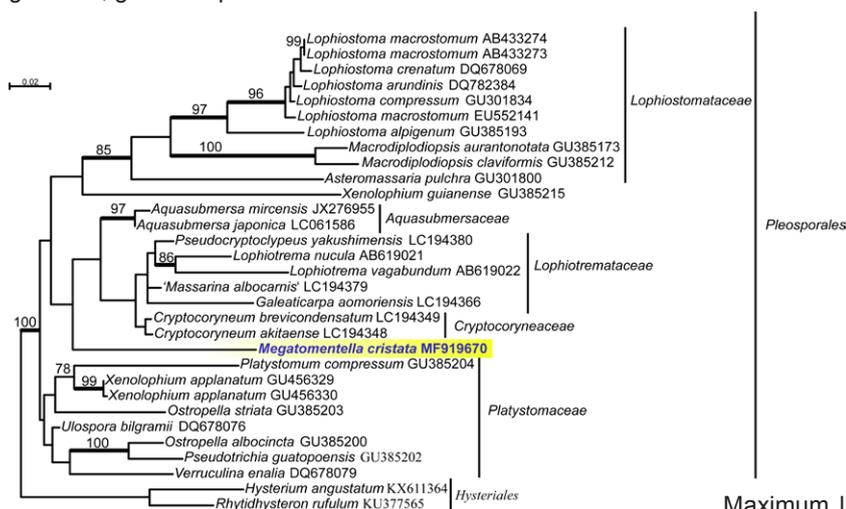


*Megatomentella cristata*



Fungal Planet 641 – 20 December 2017

***Megatomentella*** D.A.C. Almeida, Gusmão & A.N. Mill., *gen. nov.**Etymology.* Referring to the well-developed tomentum.Classification — *Incertae sedis*, *Pleosporales*, *Dothideomycetes*.*Ascomata* superficial, globose, tomentose, subiculum present, ostiolate. *Beak* ridge-like, laterally compressed, opening by an elongate, slit-like ostiole. *Pseudoparaphyses* trabeculate, withgelatinous coating. *Asci* clavate, long-stipitate, thin-walled, bitunicate, fissitunicate, apex rounded, octosporous. *Ascospores* biseriate, fusiform, curved, septate, hyaline, without sheath, guttulate.*Type species.* *Megatomentella cristata* D.A.C. Almeida, Gusmão & A.N. Mill.  
Mycobank MB822811.***Megatomentella cristata*** D.A.C. Almeida, Gusmão & A.N. Mill., *sp. nov.**Etymology.* From Latin *cristatus*. Referring to the laterally compressed ascomal neck, resembling a crest.*Ascomata* 340–480 × 300–480 µm, superficial, numerous, densely aggregated, globose, ostiolate, surface roughened, tomentose, sometimes forming subgroups with continuous tomentum giving an areolate aspect. *Beak* 145–220 µm long, 90–130 µm high, apical, laterally compressed, opening by an elongate, slit-like ostiole of same length; subiculum abundant, formed by brown, branched hyphae appressed to substrate. *Ascomal wall* in longitudinal section 2-layered, 26–53 µm thick, inner layer pseudoparenchymatous, 15–28 µm thick, of *textura angularis* alternating with *textura prismatica*, composed of 8–10 layers of polygonal to elongate, pale brown, thick-walled, pseudoparenchymatic cells, outer layer heavily-melanised, 21–33 µm thick, not showing individual cell structure. *Pseudoparaphyses* 1–1.5 µm wide, trabeculate, with gelatinous coating. *Asci* 109–225 × 8–12 µm, spore-bearing part 48–73 µm, stipe 49–170 µm, clavate, long-stipitate, thin-walled, bitunicate, fissitunicate, apex rounded, octosporous. *Ascospores* 17–27 × 3.5–6 µm, biseriate, fusiform, straight or curved, 1-septate, upper cell swollen near the septum, hyaline, without sheath, guttulate, guttules spherical.*Typus.* BRAZIL, Ceará, Ubajara, Ubajara National Park, on branches of unidentified plant, 4 May 2012, D.A.C. Almeida (holotype HUEFS 155135, ITS and LSU sequences GenBank MF919671 and MF919670, MycoBank MB822842).*Notes* — *Megatomentella* is similar to *Ostropella* and *Xenolophium* in the morphological characteristics of the ascomata, which are superficial, globose with a slit-like ostiole, and the long-stipitate asci enclosing eight, fusiform ascospores. However, the ascomata of these two genera differ from *Megatomentella* by having papillae instead of a distinct laterally compressed beak and the ascospores are usually pigmented and constricted at the septa. *Lophiostoma* can also be compared to our material in the ascomata opening by a slit-like ostiole, but it is distinct in having immersed to erumpent ascomata lacking tomentum and by short-stipitate asci. Additionally, our specimen grouped in an independent clade within *Pleosporales*, but separate from the type species of these three genera: *L. macrostomum*, *O. albocincta* and *X. applanatum*. *Megatomentella* may represent a member of a distinct family in *Pleosporales*, but a multi-gene phylogeny is necessary to add support to this clade before a new family is warranted.*Colour illustrations.* Brazil, Ubajara National Park, field track inside an enclave of Atlantic Forest located on a mountaintop where the species was collected; ascomata; longitudinal section through ascomal wall; ascus; ascus apex showing fissitunicate dehiscence; centrum with several asci and pseudoparaphyses; ascospores. Scale bars (as indicated).Maximum likelihood (ML) phylogenetic tree obtained using RAXML in CIPRES based on LSU nrDNA. Numbers above branches refer to bootstrap support values  $\geq 70\%$  and thickened branches indicate significant Bayesian posterior probabilities  $\geq 95\%$ . The new genus is highlighted in yellow. GenBank accession numbers for the LSU sequences are given after taxon names.Davi A.C. de Almeida & Luís F.P. Gusmão, Universidade Estadual de Feira de Santana, Av. Transnordestina, S/N – Novo Horizonte, 44036-900, Feira de Santana, Bahia, Brazil; e-mail: daviaugusto@gmail.com  
Andrew N. Miller, University of Illinois Urbana-Champaign, Illinois Natural History Survey, 1816 South Oak Street, Champaign, Illinois, 61820, USA; e-mail: amiller7@illinois.edu