



**Figure S4.** Maximum likelihood tree inferred from *tef1* sequences of specimens of *Cystolepiota* and related genera. Bootstrap values of  $ML \geq 50\%$  are indicated above the branches. Type collections are marked with an asterisk. *C.* = *Cystolepiota*; *Co.* = *Coprinus*; *E.* = *Echinoderma*; *L.* = *Lepiota*; *P.* = *Pulverolepiota*; *S.* = *Smithiomyces*. *Co. comatus* is used as outgroup.