Dipsacus sylvestris Huds. (syn. D. fullonum L., common teasel) (Dipsacaceae) is a European species introduced into North America, and now widely established and regarded as a noxious weed. Powdery mildew fungi (Erysiphales) reported previously from this host include Phyllactinia species in Washington State and Sphaerotheca fuliginea (Schlecht. : Fr.) Poll. in Europe (3). These reports are inconsistent with Braun’s world (1) and European (2) monographs of Erysiphales which list only Sphaerotheca dipsacearum (Tul. & Tul.) Junell, Erysiphe knautiae Duby, and Leveillula taurica (Lév.) G. Arnaud on dipsacaceous hosts. In October 2005, a powdery mildew was observed on D. sylvestris in two locations in Pullman, Whitman Co., WA. Examination of diseased material confirmed that the causal agent was S. dipsacearum. This report provides the first documentation of S. dipsacearum on D. sylvestris in North America.

Fungal mycelium was amphigenous, primarily on the adaxial leaf surface; colonies were sparse, effuse, and whitish. Appressoria were not found. Conidiophores (Fig. 1) were straight with cylindric foot-cells that measured (16-34-85(-94) × (8-9)-12.5(-14.5) µm. Conidia formed in chains (Fig. 2), contained fibrosin bodies (Figs. 3,4), were ellipsoid-ovoid to doliiform and measured (26-)29.5-38(-41.5) × (15-)16-19.5(-21) µm. The teleomorph was absent. A voucher specimen was deposited in the Mycological Herbarium at Washington State University.
Based on host and the production of chains of conidia with fibrosin bodies the observed fungus was determined using Braun's key (2) to be *S. dipsacearum* [also known as *Podosphaera dipsacearum* (Tul. & C. Tul.) U. Braun & S. Takam.]. However, detailed features of the anamorph of this fungus are not contained in Braun's monographs (1,2) and this report appears to be the first characterizing the anamorph in detail. The fungus is distinct from *E. knautiae* and *Phyllactinia* spp. which produce single monomorphic conidia, and *L. taurica*, which produces dimorphic conidia (1,2).

Recent tabulations of potential biological control agents on *Dipsacus* spp. world-wide (4) include *Sphaerotheca fuliginea* on the basis of host-fungus records (3). However, that species is subject to varying taxonomic interpretations and now is regarded as specific to hosts in the Scrophulariaceae (1). However, we have confirmed presence of a *Phyllactinia* sp. on *D. sylvestris* by examination of the herbarium specimen WSP 5500, collected in Washington State in 1905 and the original source of subsequent references (3,4). Although colonies on all specimens examined by us were only sparsely distributed, there is interest in powdery mildew as a potential biological control agent of *Dipsacus* spp. (4). This interest, if pursued, suggests a need for further taxonomic work, including host range studies, on collections from a broader geographic area.

**Literature Cited**