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Podosphaera dipsacacearum on *Knautia macedonica*

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Abstract: Braun, U. 2016: *Podosphaera dipsacacearum* on *Knautia macedonica*. Schlechtendalia **30**: 37–38.

Conidiophores, conidia and chasmothecia of the powdery mildew *Podosphaera dipsacacearum* have been found in Germany (Berlin) on cultivated *Knautia macedonica*. This is the first record of this species on this host plant.

Zusammenfassung: Braun, U. 2016: *Podosphaera dipsacacearum* auf *Knautia macedonica*. Schlechtendalia **30**: 37–38.

Konidienträger, Konidien und Chasmothecien des Mehltaus *Podosphaera dipsacacearum* wurden in Deutschland (Berlin) auf kultivierter *Knautia macedonica* gefunden. Es handelt sich dabei um die erste Angabe dieser Art auf diesem Wirt.

Key words: Powdery mildew, new record, new host.

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Podosphaera dipsacacearum is a powdery mildew of *Podosphaera* sect. *Sphaerotheca* subsect. *Sphaerotheca* occurring on species of various genera of the *Dipsacaceae*, including *Cephalaria*, *Dipsacus*, *Knautia*, *Pterocephalus*, *Scabiosa*, and *Tremastelma*, and on *Morinia*, *Moriniaceae* (Braun & Cook 2012). *Knautia arvensis*, *K. drymeia*, *K. integrifolia*, and *K. longifolia* are known to be host species of *P. dipsacacearum*. The asexual and sexual morph of this species has recently been found in Berlin, Germany, on *Knautia macedonica* cultivated in a plant tub. This is the first record of this fungus on this host. *Knautia macedonica* is an herbaceous perennial cultivated as ornamental plant, which is susceptible to powdery mildew. There are numerous records and photographs of symptoms available on the internet, but usually without precise identification of the causal agent (e.g. Ellingham 2015, UK). *Knautia macedonica* is known as host species of *Erysiphe knautiae* Duby from Germany, Romania, and Switzerland (Braun & Cook 2012). Lehmann & Jage (2005) [see also Jage et al. 2010] published a first record of *E. knautiae* on *Knautia macedonica* from Germany. A photograph of symptoms on leaves of a German collection was provided via internet by Kruse (2009). Hence, proper identifications of powdery mildews on *Knautia macedonica* require microscopic examinations since two species, viz. *Erysiphe knautiae* as well as *Podosphaera dipsacacearum*, have to be taken into consideration.

Podosphaera dipsacacearum (Tul. & C. Tul.) U. Braun & S. Takam.

Germany, Berlin, Steglitz, Schloßstraße, on *Knautia macedonica* Griseb., cultivated in a plant tube, 16 Sep. 2016, U. Braun (HAL 3156 F).

Mycelium on stems and leaves, forming thin white patches or covers; hyphae branched, septate, thin-walled, hyaline, smooth, 3–7 µm wide. Conidiophores arising from the upper surface of superficial hyphae, erect, to 160 µm long, foot-cells subcylindrical, straight, 60–120 × 8–12 µm, followed by 1–3 much shorter cells, basal septum not or only slightly elevated above junction with the mother cell. Conidia catenescent, with crenate edge line, ellipsoid-ovoid, doliiform, with fibrosin bodies, 25–35 × 15–20 µm. Chasmothecia 70–90 µm diam, peridial cells 10–25 µm diam, appendages few to numerous, 0.5–2 times as long as the chasmothecial diam, mycelioid, 3–8 µm wide, septate, thin-walled, smooth, colourless to brown throughout when short or paler towards the tip when longer, ascus subglobose, 60–70 × 60–65 µm, sessile, wall to 2 µm wide, 8-spored, ascospores broad ellipsoid-ovoid, 15–25 × 10–13 µm, colourless.

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Artikel/Article: Podosphaera dipsacacearum on Knautia macedonica 37-38