First report of powdery mildew caused by *Golovinomyces neosalviae* on *Lavandula stoechas* in Italy

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During winter and spring of 2019, several plants of *Lavandula stoechas* cv. *Ruflex* growing in a farm located in Albenga (Savona province, northern Italy) showed a whitish to greyish mycelium colonizing stems and leaves within the canopy. Conidiophores measured $124\text{--}236 \times 8\text{--}15$ (average: 163×11) μm and they were variable in size and arrangement of cells. Foot-cells were erect or curved at the base, with a basal septum raising above the mother cell and measured $28\text{--}146 \times 8\text{--}13$ (average: 67×11) μm . The foot-cells were followed by 2–5 cells measuring $14\text{--}95 \times 8\text{--}15$ (average: 32×11) μm . Conidia were lacking of fibrosin bodies, they were doliform to limoniform, formed chains (up to 5 conidia) and measured $28\text{--}40 \times 17\text{--}24$ (average: 34×20) μm , with length/width (l/w) ratio between 1.3 and 2.2. Chasmothecia were not observed. The DNA of the fungal pathogen was extracted from mycelium collected from affected tissues. The primers ITS1/PM6 (White et al. 1990) and PM5/NLP2 (Takamatsu and Kano 2001) were used for a PCR reaction to amplify the Internal Transcribed Spacer (ITS) region and the 28S rRNA gene. Two sequences with 515 and 618 bp respectively (GenBank accession numbers MN053030 and MN749535) were obtained. The NCBI blast analysis of these sequences showed 99.22% (511/515) and 99.68% (616/618) homology respectively, with *Golovinomyces neosalviae* M. Scholler, U. Braun & Anke Schmidt (MG386701 from *Salvia officinalis*). Therefore, the causal agent of the powdery mildew on *L. stoechas* was identified as *G. neosalviae*, accordingly with

the features described for this pathogen (Scholler et al. 2016). A pathogenicity test was performed by gently pressing the leaves of three plants of *L. stoechas* cv. *Ruflex* onto leaves of the same host affected by *G. neosalviae*. Three non-inoculated plants were used as control. About 20 days later, first symptoms and signs of powdery mildew were observed on the inoculated plant, while controls remained symptomless. *G. neosalviae* was reported on *Salvia officinalis*, *S. fruticosa* and *S. lavandulifolia* (Scholler et al. 2016). To our knowledge this is the first report of *G. neosalviae* on *L. stoechas* in Italy, as well as worldwide.

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