

The first report of *Libertella platani* on *Platanus orientalis* in Iran

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The genus *Libertella* Desm is a member of *Diatrypaceae* family in the order of *Xylariales* (Smith et al. 2003). *Libertella* has often been reported in various vascular plants (Kirk et al. 2001). During December 2017, *Libertella* isolates were recovered from the trunk of plane trees (*Platanus orientalis*), showing decline symptoms in Kermanshah urban area. Conidiomata (acervuli) were observed on the

surface of the infected trunk, immersed in the bark, scattered and flat to subconical. Conidiophores were crowded, acicular, somewhat straight, branched, and approximately the same length as the conidia. Tendrils were highly gelatinous, coiled and twisted form with orange color. Conidia were abundant, one-celled, hyaline, slender, and strongly arcuate, $17-25 (21) \times 0.7-0.9 (0.8) \mu\text{m}$ (Fig. 1a–d). The identification was carried out comparing the information registered with those published in the specialized literature and our sample is identical with the description of *L. platani* provided by Grove (1937).

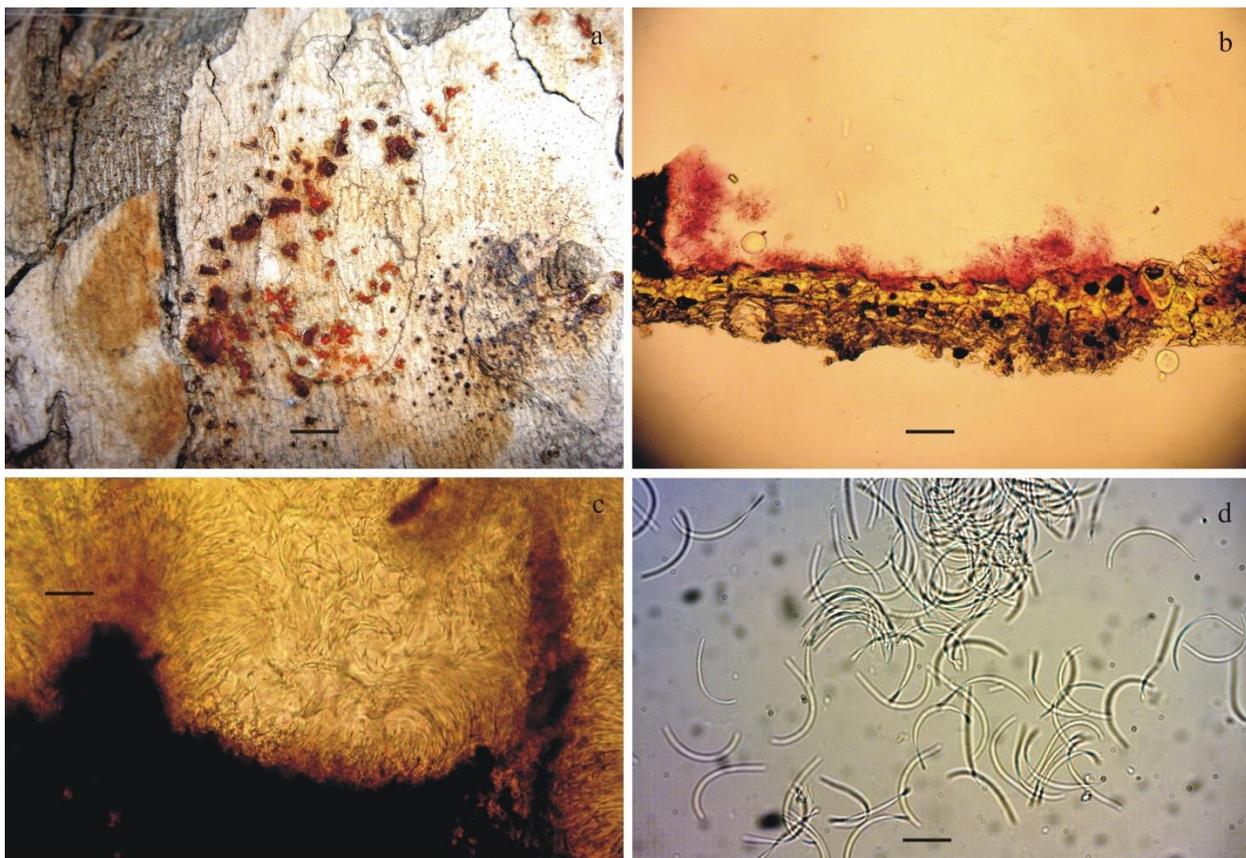


Fig. 1. *Libertella platani*. **a.** Acervuli on a twig of *Platanus orientalis* and a red tendril of conidia exuded from acervuli, **b, c.** Flat and subconical acervulus, **d.** Filiform conidia. — Scale bars: a = 5 mm, b-d = 20 μm .

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The voucher specimen (IRAN 16935F) was deposited in the Fungal Reference Collection of the Ministry of Jihad-e Agriculture (IRAN...F) at the Iranian Research Institute of Plant Protection, Tehran, Iran. *Libertella* species are listed as parasites or saprophytes on different species of woody plants (Ellis & Ellis 1985). Teleomorphs are mostly members of the genus *Diatrypella*, however, some of them are also members of other genera, namely *Eutypa*, *Eutypella*, *Diaporthe*, and *Polystigma* (Kirk et al. 2001). This genus has been reported from England, France, Germany, Romania, Ukraine, Switzerland and Hungary (Sutton 1980; Dudka et al. 2004; Pilotti & Ponzio 2004; Magyar & Toth 2003). To date, there is no available information about the occurrence of a decline of plane trees and associated *Libertella* species in Iran. To our knowledge, this is the first report of the *L. platani* for mycobiota of Iran. The tendril color of this species is same as *Cytospora* fungus. The distinction between *Cytospora* and *Libertella* is essential for the assumption of an appropriate management strategy.

REFERENCES

- Dudka Io, Heluta VP, Tykhonenko YY, AndrianovaTV, Hayova VP, Prydiuk MP, Dzhagan VV, Isikov VP. 2004. Fungi of the Crimean Peninsula. M.G. Kholodny Institute of Botany, National Academy of Sciences of Ukraine, Kiev, Ukraine.
- Ellis MB, Ellis JP. 1985. Microfungi on land plants. Croom Helm, London, UK.
- Grove WB. 1937. British stem- and leaf-fungi (Coelomycetes), vol. 2. Cambridge University Press, Cambridge, UK.
- Kirk PM, Cannon PF, David JC, Stalpers JA. 2001. Ainsworth and Bisby's dictionary of the fungi, 9th edn. CAB International, Wallingford, UK.
- Magyar D, Toth S. 2003. Data to the knowledge of the microscopic fungi in the forests around Budakeszi (Buda Hills, Hungary). Acta Phytopathologica et Entomologica Hungarica 38:61–72.
- Pilotti M, Ponzio V. 2004. Cancro del platano con caratteristiche simili al cancro colorato: sintomi e funghi associati. Informatore Fitopatologico 11:43–53.
- Smith GJD, Liew ECY, Hyde KD. 2003. The Xylariales: a monophyletic order containing seven families. Fungal Diversity 13:185–218.
- Sutton BC 1980. The Coelomycetes. Fungi Imperfecti with pycnidia, acervuli and stromata. Commonwealth Mycological Institute, Kew, UK.