

# A New Host for *Phoma trachelii* Allesch.

## *Phoma trachelii* Allesch. için Yeni Bir Konak

Research Article

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### ABSTRACT

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*Michauxia* L'Hér. (*Campanulaceae*) is reported as a new host genus for the *Phoma trachelii* microfungi and also *Phoma trachelii* is reported for the first time from Turkey. The morphological and microscopical features of this fungi is described based on the collected materials with figures.

#### Key Words

*Phoma trachelii*, Microfungi, New host

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### ÖZET

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*Michauxia* L'Hér. (*Campanulaceae*), *Phoma trachelii* mikrofungus türü için yeni bir konakçı cins olarak kaydedilmiştir ve de *Phoma trachelii* Türkiye'den ilk defa kaydedilmiştir. Bu fungusların şekilleri ile morfolojik ve mikroskobik özellikleri toplanan örneklerle bağlı olarak tanımlanmıştır.

#### Anahtar Kelimeler

*Phoma trachelii*, Mikrofungus, Yeni konak

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## INTRODUCTION

*Phoma* Sacc. is wide spread genus of Coleomycetes fungi, with about 140 species [1]. The species placed in this genus may occur on any part of any living or dead plant. They may be saprophytic or parasitic; but most of them are wound-parasites.

*Phoma trachelii* Allesch. is found on *Campanula* L. and *Trachelium* Tourn. ex L. (*Campanulaceae*) genera. It is parasitic on leaf and stem of host plants. It has not determined on *Michauxia* L'Hér. genera before. This paper presents microfungi species collected from Kayseri province in Turkey.

## MATERIALS AND METHODS

Materials were collected in 2013 from Aladaglar mountains (Kayseri Province) in Turkey. The host specimens were prepared according to established herbarium techniques. Host plants identified according to Damboldt [2]. Spores were scraped from dried host specimens and mounted

in lactophenol. Analysis LS Starter software used to measure. Microfungi identified according to Saccardo [3]. The current names of fungi are given according to [www.indexfungorum.org](http://www.indexfungorum.org). Names of host plants and families are given according to <http://www.ipni.org> and <http://www.theplantlist.org>. The specimens are preserved in the Inonu University Herbarium (INU), Turkey.

## RESULTS AND DISCUSSION

*Phoma trachelii* Allesch., Fungi bavaria exsic.: no. 360 (1897).

Spot roundish or irregular, amphigenous on leaf and stems, at first white, then pale brown, 1-6 mm diam. Pycnidia immersed, covered by the epidermis, globose or subglobose, brown, 60-120 µm diam, opening by a round pore, pore 10-25 µm diam. Spores 3.5-7 × 1.5 -2.5 µm, cylindrical with rounded end, biguttulate, hyaline.

**Specimens** examined-On *Michauxia campanuloides* L'Hér. ex Aiton (*Campanulaceae*).



**Figure 1.** *Phoma trachelii* A. Overview over the whole herbarium specimen B. Pycnidia on stem surface; C. Pycnidia (LM); D. Konidiospores (LM).

Turkey: Kayseri, Yahyali, Derebag village, around waterfall, 1250-1300 m, 05.10. 2013, S. Kabaktepe 7279. (INU 1199).

**Remarks:** *Michauxia* L'Hér. (*Campanulaceae*) is reported as a new host genus for the *Phoma trachelii* microfungi and also *Phoma trachelii* is reported for the first time from Turkey.

Known from Asia, Europe, South and North America on *Campanula* sp. [4], from Netherlands on *Campanula isophylla* Moretti [5], from Poland on *Campanula trachelium* L. [6], from Asia, Europe, South and North America [4] and Netherlands on *Trachelium* sp. [5].

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### REFERENCES

1. P. Kirk, P.F. Cannon, D.W. Minter, J.A. Stalpers, Ainsworth & Bisby's Dictionary of the Fungi. 10th edn. CAB International, Wallingford, UK, 2008.
2. J. Damboldt, *Michauxia* L'Hér. In: Davis PH, editor. Flora of Turkey and the East Aegean Islands, Vol. 6: 81-82. Edinburgh University Press, Edinburgh, 1978.
3. P.A. Saccardo, *Sylloge Fungorum Omnium Hucusque Cognitorum*, Vol 11. Supplementum universale, pars III. Padova, 1985.
4. G.H. Boerema, J. De Gruyter, M.E. Noordeloos, M.E.C. Hamers, *Phoma identification manual: differentiation of specific and infra-specific taxa in culture*. CABI Publishing, 470 pages, 2004.
5. G.H. Boerema, J. De Gruyter, M.E. Noordeloos, Contributions towards a monograph of *Phoma* (Coelemycetes) IV. Section Heterospora: taxa with large sized conidial dimorph, in vivo sometimes as *Stagonosporopsis* synanamorphs. *Persoonia* 16, (1997) 335-371.
6. W. Mullenko, T. Maejewski, M. Ruziewicz-Michalska, M. A Preliminary Checklist of Micromycetes in Poland. *W. Szafer Institute of Botany, Polish Academy of Sciences* 9 (2008) 752.