

CONTRIBUTION TO THE IDENTIFICATION OF *Pseudocercospora* SPECIES IN IRAN

M. PIRNIA^{1*}, R. ZARE², H. R. ZAMANIZADEH³, A. KHODAPARAST⁴
and B. DJAVADI²

(Received: 2. 7. 2011; Accepted: 18. 4. 2012)

Abstract

Eight collections of *Pseudocercospora* species from different localities in Northern provinces of Iran were obtained and examined during Summer-Autumn of 2010. Furthermore all of specimens belonging to the genus *Pseudocercospora* deposited in fungal collection of Ministry of Jihad-e-Agriculture in Iranian Research Institute of Plant Protection were re-examined. Eight species on nine host plants were identified including: *Pseudocercospora atromarginalis* (on *Solanum nigrum*), *P. cruenta* (on *Vigna sinensis*), *P. griseola* (on *Phaseolus vulgaris*), *P. heteromalla* (on *Rubus* sp.), *P. kaki* (on *Diospyros lotus*, *D. kaki*), *P. punicae* (on *Punica granatum*), *P. salicina* (on *Salix alba*), *P. vitis* (on *Vitis sylvestris*). Among these, *P. heteromalla* and *P. salicina* are new records for mycobiota of Iran. The name of *Phaeoisariopsis griseola* changed into *Pseudocercospora griseola*. Other species were already been reported from Iran.

Keywords: *Pseudocercospora*, New species, Host plant, Leaf spot.

See Persian text for figures and tables (Pages ۳۱۹-۳۲۷).

*: Corresponding Author, Email: pirnia@ymail.com

1. Assis. Prof. of Plant Pathol., Islamic Azad University, Damghan Branch, Damghan, Iran.
2. Res. Prof. and Researcher of Iranian Research Institute of Plant Protection, Tehran, Iran.
3. Assoc. Prof. of Plant Pathol., Islamic Azad University, Science and Research Branch, Tehran, Iran.
4. Assoc. Prof. of Plant Pathol., College of Agriculture, University of Guilan, Rasht, Iran.

References

- BRAUN, U. and CROUS, P. W. 2007. The diversity of cercosporoid hyphomycetes: new species, combinations, names and nomenclatural clarifications. **Fungal Diversity** 26: 55–72.
- CHUPP, C. 1954. **A monograph of the fungus genus *Cercospora***. Chopd Pub. Ithaca, New York.
- CROUS, P.W. and BRAUN, U. 2003. ***Mycosphaerella* and its anamorphs: 1. Names published in *Cercospora* and *Passalora***. CBS Biodiversity Series 1: 1–569.
- CROUS, P.W., ALFENAS, A.C. and BARRETO, R.W. 1997. Cercosporoid fungi from Brazil. 1. **Mycotaxon** 64: 405–430.
- CROUS, P.W., LIEBENBERG, M. M., BRAUN, U. and GROENEWALD, J. Z. 2006. Re-evaluating the taxonomic status of *Phaeoisariopsis griseola*, the causal agent of angular leaf spot of bean. **Studies in Mycol.** 55: 163–173.
- DEIGHTON, F. C. 1976. Studies on *Cercospora* and allied genera. VI. *Pseudocercospora* Speg. *Pantospora* Cif. and *Cercoseptoria* Petr. **Mycological Papers** 140: 1–168.
- DEIGHTON, F.C. 1987. New species of *Pseudocercospora* and *Mycovellosiella*, and new combinations into *Pseudocercospora* and *Phaeoramularia*. **Trans. Br. Mycol. Soc.** 88: 365–391.
- ELLIS, M. B. 1971. **Dematiaceous Hyphomycetes**. CMI, Kew, England.
- ELLIS, M. B. 1976. **More Dematiaceous Hyphomycetes**. CMI, Kew, England.
- ERSHAD, D. 1990. New records of two *Cercospora* species for Iran. **Iran. J. Plant Pathol.** 26: 41.
- ERSHAD, D. 2002. A new *Cercospora* species from Iran. **Rostaniha** 3: 47–50.
- ERSHAD, D. 2009. **Fungi of Iran**. Iranian Research Institute of Plant Protection, Tehran.
- ERSHAD, D. and KHOSRAVI, V. 1996. Two fungi new to Iranian mycoflora from Baluchestan. **Iran. J. Plant Pathol.** 32: 219–292. (In Farsi With English Summary).
- ESFANDIARI, E. 1946. Deuxième liste des fungi ramassés en Iran. **Appl. Entomol. and Phytopathol.** 2: 10–16.
- HEDJAROUDE, GH. A. 1976. Report on some form-species of imperfect fungi of Caspian Sea area. **Iran. J. Plant Pathol.** 12: 89–94. (In Farsi With English Summary).
- HSIEH, W.H. and Goh, T.K. 1990. ***Cercospora* and Similar Fungi from Taiwan**. Maw Chang Book Company, Taiwan (Republic of China). 376pp.
- KAISER, W.J., DANESH, D., OKHOVAT, M. and MOSSAHEBI, G.H. 1968. Diseases of pulse crops (edible legumes) in Iran. **Iran. J. Plant Pathol.** 4 (3): 10–14. (In Farsi With English Summary).
- KHABIRI, E. 1958. Contribution à la mycoflore de l' Iran. Troisième liste. **Revue Mycologique** 23: 408–412.
- PETRAK, F. and ESFANDIARI, E. 1941. Beiträge zur Kenntnis der iranischen Pilzflora. **Ann. Mycol.** 39: 204–228.
- PIRNIA, M., ZARE, R., ZAMANIZADEH, H.R. and KHODAPARAST, A. 2010. Contribution to the identification of *Cercospora* species in Iran. **Rostaniha** 11(2): 183–189
- PIRNIA, M., ZARE, R., ZAMANIZADEH, H.R. and KHODAPARAST, A. 2012a. New records of cercosporoid hyphomycetes from Iran. **Mycotaxon** 120 157-169.
- PIRNIA, M., ZARE, R., ZAMANIZADEH, H.R., KHODAPARAST, A. and JAVADI ESTAHBANATI, A.R. 2012b. Contribution to the identification of the genus *Passalora* in Iran. **Appl. Entomol. and Phytopathol.** 80(1) 61-68.
- PIRNIA, M., ZARE, R., ZAMANIZADEH, H.R., KHODAPARAST, A. and JAVADI ESTAHBANATI, A.R. 2012c. Taxonomic study of the genus *Ramularia* and *Ramularia*-like genera in Iran. **Rostaniha** 13(1) 11-20.
- SCHARIF, G. and ERSHAD, D. 1966. **A List of Fungi on Cultivated Plants, Shrubs and Trees of Iran**. Ministry of Agriculture, Plant Pests and Diseases Research Institute, Evin, Tehran.
- VIENNOT-BOURGIN, G., ALE-AGHA, N. and ERSHAD, D. 1970. Les champignons parasites de l' Iran. (Nouvelle contribution). **Annal. de Phytopathologie.** 2(4): 689–734.