



## First report of *Alternaria infectoria* on amaranth (*Amaranthus caudatus* ssp. *mantegazzianus*) in Argentina

M.C. Noelting<sup>1,2\*</sup>, M.C. Molina<sup>2,3</sup>, C.I. Mónaco<sup>1,4</sup>, M.C. Sandoval<sup>5</sup> and A. Perelló<sup>1,3</sup>

<sup>1</sup> Facultad de Ciencias Agrarias y Forestales, Universidad Nacional de La Plata, calle 60 y 119, CP 1900, La Plata, Argentina; <sup>2</sup> Instituto Fitotécnico de Santa Catalina, Garibaldi 3400, CC N° 4, CP 1836, Llavallol, Buenos Aires, Argentina; <sup>3</sup> Consejo Nacional de Investigaciones Científicas y Técnicas, Rivadavia 1917, CP 1033, Ciudad Autónoma de Buenos Aires, Argentina; <sup>4</sup> Centro de Investigaciones de Fitopatología, Facultad de Ciencias Agrarias y Forestales, Universidad Nacional de La Plata calle 60 y 119, La Plata, CP 1900, Buenos Aires, Argentina; <sup>5</sup> Facultad de Ciencias Agrarias, Universidad Nacional de Lomas de Zamora, ruta 4 km 2, CP 1836, Llavallol, Buenos Aires, Argentina

\*Corresponding author: E-mail: noelting@mdp.gov.ar

Received: 03 Oct 2011. Published: 02 Mar 2012. Keywords: seed discoloration, fungal disease

Abstract: The first report of *Alternaria infectoria* on amaranth (*Amaranthus caudatus* ssp. *mantegazzianus*) in Argentina is presented. The fungus was isolated from amaranth seeds showing discoloration. The fungus was identified by morphological and molecular characteristics. The pathogen was confirmed by inoculation tests. The disease was caused by *Alternaria infectoria* and was characterized by seed discoloration and rot. The fungus was identified by morphological and molecular characteristics. The pathogen was confirmed by inoculation tests. The disease was caused by *Alternaria infectoria* and was characterized by seed discoloration and rot.

**Introduction**  
Amaranth (*Amaranthus caudatus* ssp. *mantegazzianus*) is a widely cultivated crop in Argentina. It is used for human consumption and as a source of animal feed. The crop is susceptible to several fungal diseases, including seed rot and seed discoloration. The most common cause of seed rot and discoloration is *Alternaria infectoria*. This fungus is a member of the *Alternaria* genus, which is known for its ability to produce mycotoxins. The first report of *Alternaria infectoria* on amaranth in Argentina is presented in this paper.

**Materials and Methods**  
The study was conducted in the laboratory of the Faculty of Agricultural and Forest Sciences, Universidad Nacional de La Plata. The fungus was isolated from amaranth seeds showing discoloration. The fungus was identified by morphological and molecular characteristics. The pathogen was confirmed by inoculation tests. The disease was caused by *Alternaria infectoria* and was characterized by seed discoloration and rot.

### Acknowledgements

The authors thank the National Council of Scientific and Technological Research (CONICET) for the grant that supported this work.

### References

- 1. Noelting MC, Molina MC, Mónaco CI, Sandoval MC, Perelló A (2012) First report of *Alternaria infectoria* on amaranth (*Amaranthus caudatus* ssp. *mantegazzianus*) in Argentina. *New Disease Reports* 25, 11. [doi:10.5197/j.2044-0588.2012.025.011]
- 2. Noelting MC, Molina MC, Mónaco CI, Sandoval MC, Perelló A (2011) First report of *Alternaria infectoria* on amaranth (*Amaranthus caudatus* ssp. *mantegazzianus*) in Argentina. *New Disease Reports* 25, 11. [doi:10.5197/j.2044-0588.2011.025.011]
- 3. Noelting MC, Molina MC, Mónaco CI, Sandoval MC, Perelló A (2011) First report of *Alternaria infectoria* on amaranth (*Amaranthus caudatus* ssp. *mantegazzianus*) in Argentina. *New Disease Reports* 25, 11. [doi:10.5197/j.2044-0588.2011.025.011]

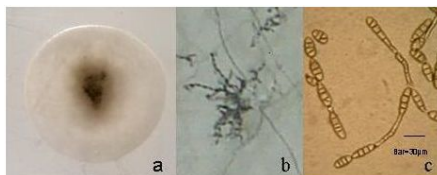


Figure 2



Figure 3

Figure 1

**To cite this report:** Noelting MC, Molina MC, Mónaco CI, Sandoval MC, Perelló A, 2012. First report of *Alternaria infectoria* on amaranth (*Amaranthus caudatus* ssp. *mantegazzianus*) in Argentina. *New Disease Reports* 25, 11. [doi:10.5197/j.2044-0588.2012.025.011]

©2012 The Authors

This report was published on-line at [www.ndrs.org.uk](http://www.ndrs.org.uk) where high quality versions of the figures can be found.