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of *Petroselinum crispum* (Mill.) Fuss. in
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crispum (Mill.) Fuss. en viveros de planta de aromática en
contenedor del Norte de Portugal

Short Scientific note - *Nota corta científica*

J.L. Andrés Ares

Consultorías Noroeste



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J.L. Andrés Ares

Consultorías Noroeste

Illustrations – Ilustraciones: M. Marín Rodríguez

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Abstract

In the present paper the author describes the presence of the quality pathogen *Passalora punctum* (Delacr.) Arx 1987 infecting potted *Petroselinum crispum* plants in Portuguese nurseries. He describes the pathogen as well as the symptoms observed on the host. This is the first reference of the presence of this pathogen in Portugal.

Key words: Leaf spots, container parsley

Resumen

En el presente trabajo el autor describe la presencia de *Passalora punctum* (Delacr.) Arx 1987 como patógeno de *Petroselinum crispum* en contenedor en los viveros de Portugal. Describe el patógeno así como la sintomatología observada sobre el hospedador. Esta publicación es la primera referencia de la presencia de este patógeno en este cultivo en Portugal.

Palabras clave: Cercosporiosis, perejil en contenedor

1. Introduction

Container aromatic species are increasing in surface in the last years both in Galicia and in Northern Portugal. In November 2019, yellow irregular leaf spots were found on container *Petroselinum crispum*, at a flowering potted plant nursery located in Northern Portugal. This plant production centre was inspected by the author diagnosing the causal agent responsible of the disease.

The phytopathological analysis were carried out at the private laboratory of the author.

2. Symptoms

Yellow to brown irregular spots without a distinct margin, 2–5 mm long and 1–2 mm wide, were observed on the leaves and stems. Sometimes light brown spots with a yellow halo were

produced. Sometimes the spots gained surface and affected the main part of the leaf. Inside the spots, mainly on the lower surface, we could observe brown to black pustules that became white with the sporulation of the fungus. With favourable conditions to the disease the pathogen may produce the complete yellowing of the whole surface of the plant leaves.

3. Isolation of the causal fungus

Fragments of the pustules were plated on slides with methylene blue used as staining solution. The fungal structures were observed on optical microscope.

Passalora species were identified following taxonomical criteria and pathogen descriptions carried out by Swiderska-Burek (2015).

4. Results: morphological characteristics

Conidiomata punctiform, large, sporodochial; stromata substomatal, large. Conidiophores very numerous, in dense fascicles usually curved, continuous or with a single basal septum, brown, partly geniculate. Not branched Conidia subcylindric –obclavate–, hyaline or subhyaline, smooth and slightly curved, with 1–3 septa. Fi-

gures nº 1 and nº 2. The species was identified as *Passalora punctum* (Delacr.) Arx 1987.

5. Discussion

Until now this fungus has been known to infect *Anethum graveolens*, *Petroselinum cruispum*, *Foeniculum dulce*, *Petroselinum sativum*, *Petroselinum hortense* and *Foeniculum vulgare* on several European countries (Farr & Rossman, 2019), but not reported in Portugal. In Spain it was only reported on the Canary Islands (Farr & Rossman, 2020; Melgarejo *et al.*, 2010).

6. References

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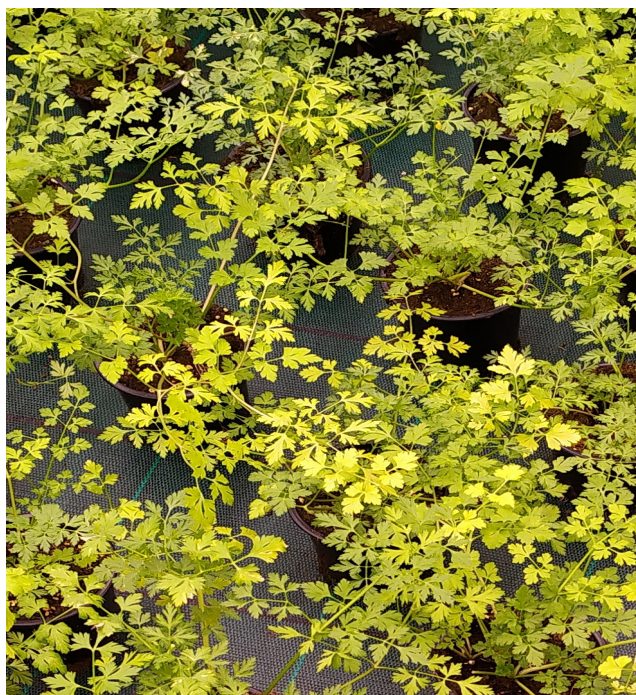


Foto 1. *Passalora punctum* on container *Petroselinum crispum*



Foto 2. *Passalora punctum* on container *Petroselinum crispum*

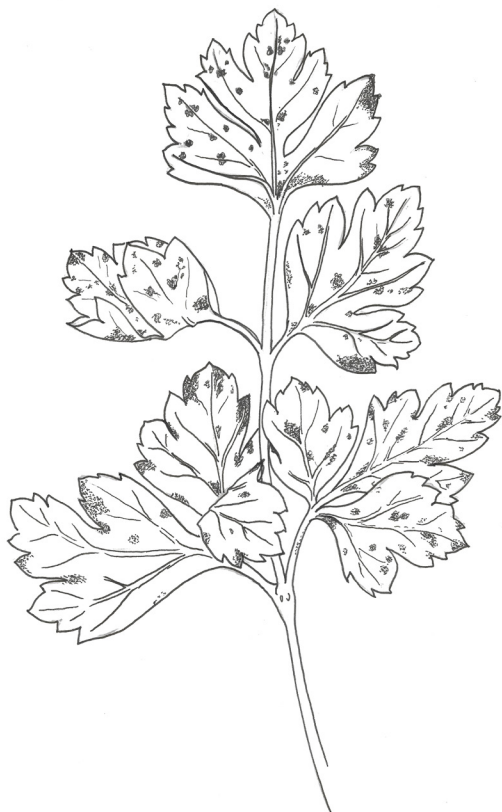


Figura 1. Symptoms of *Passalora punctum*. M. Marín for Consultorías Noroeste

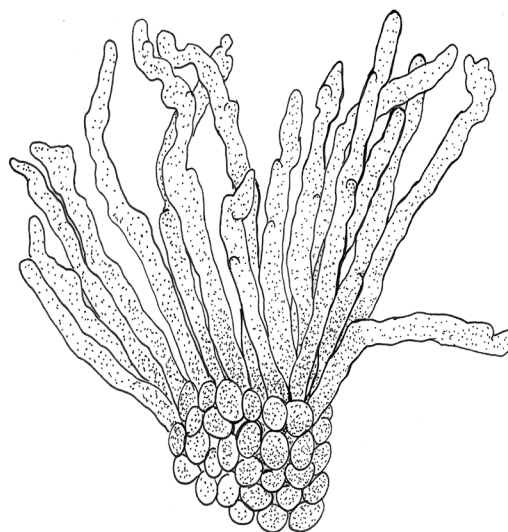


Figura 3. Conidiomata of *Passalora punctum*. M. Marín for Consultorías Noroeste

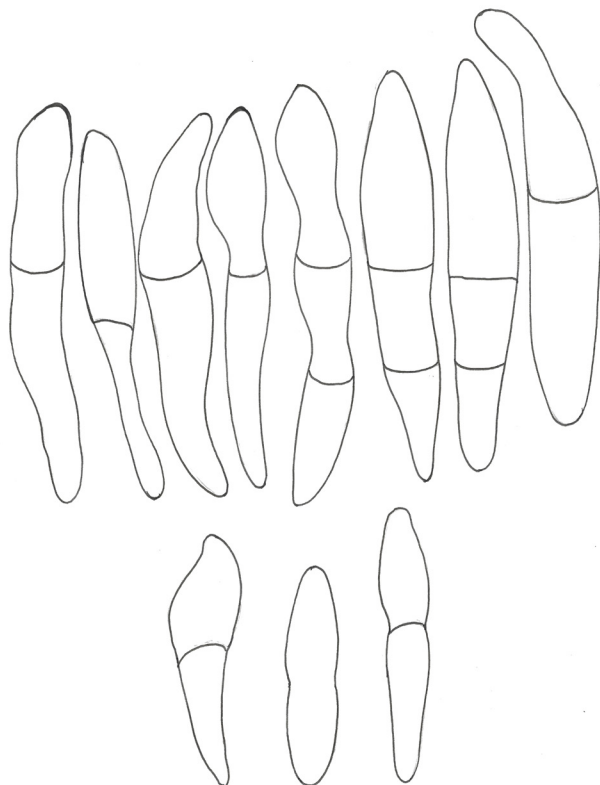


Figura 2. Conidia of *Passalora punctum*. M. Marín for Consultorías Noroeste



Foto 3. *Passalora punctum* on container *Petroselinum crispum*



Foto 4. *Passoflora punctum* on container *Petroselinum crispum*



Foto 6. *Passoflora punctum* on container *Petroselinum crispum*



Foto 5. *Passoflora punctum* on container *Petroselinum crispum*