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First report of Alternaria alternata (Fr.) Keissler causing inflorescence blight in Jatropha curcas in Sinaloa, Mexico

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Disease report/Rapport des maladies

First report of *Alternaria alternata* (Fr.) Keissler causing inflorescence blight in *Jatropha curcas* in Sinaloa, Mexico

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Abstract: A new fungal disease of inflorescences of Mexican nut (*Jatropha curcas* L.) was found on plants in two experimental fields located in Sinaloa, Mexico during summer 2011. The fungus caused inflorescence blight on flowers with typical symptoms of dark brown necrotic lesions; both plantations of *J. curcas* had disease incidence of 50–60%. Based on cultural and morphological characteristics and ribosomal DNA spacer sequences, the pathogen was identified as *Alternaria alternata* (Fr.) Keissler. To our knowledge, this is the first report of Alternaria inflorescence blight disease in *J. curcas* in Mexico.

Keywords: *Alternaria alternata*, inflorescence blight, *Jatropha curcas*, Physic nut

Résumé: Une nouvelle maladie fongique a été observée sur les inflorescences du pignon d'Inde (*Jatropha curcas* L.) dans deux parcelles expérimentales à Sinaloa, au Mexique, au cours de l'été 2011. Le champignon a causé la brûlure des fleurs et affiché les symptômes typiques, c'est-à-dire des lésions nécrotiques brun foncé. Dans les deux plantations de *J. curcas*, l'incidence de la maladie était d'environ 50 à 60 %. En se basant sur les caractéristiques culturales et morphologiques ainsi que sur les séquences de l'espaceur de l'ARNr, l'agent pathogène a été identifié en tant qu'*Alternaria alternata* (Fr.) Keissler. À notre connaissance, il s'agit de la première mention d'une alternariose sur *J. curcas* au Mexique.

Mots clés: *Alternaria alternata*, brûlure de l'inflorescence, *Jatropha curcas*, pignon d'Inde

Introduction

The Mexican nut, *Jatropha curcas* L., an oilseed plant belonging to the Euphorbiaceae family, is increasingly gaining economic importance in tropical and subtropical regions due to its ability to adapt to arid and semi-arid climates as well as its biofuel potential (Heller, 1996). However, little is known about agronomic practices, disease problems and management of *J. curcas* grown in Mexico. In Sinaloa, Mexico, several adaptation trials have been conducted since 2008. In summer 2011, symptoms of flower blight were observed on inflorescences of 3-year-old *J. curcas* plants of the ecotypes 'Morelos', 'Puebla', and 'Veracruz' growing in two experimental fields in Sinaloa, Mexico. The symptoms were small dark brown lesions that gradually coalesced to form larger necrotic lesions and finally the flowers dropped. The

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