Abstract

The chili pepper (Capsicum annuum L.) is vulnerable to a disease known in the state of Zacatecas as "dog's urine", which appeared recently and its importance increases every day, since it reduces the production of the pepper. Some of the symptoms are the necrosis of leaves and seeds, which leads to considering the presence of fungi. The aim of this study was to know the phytopathogenic fungi that were related to the diseased plants in June and July, from 2004 to 2006. Leaves, stems and seeds of healthy and diseased plants were gathered in commercial plantations in Fresnillo, Calera, Villa de Cos, Villa García and Pánfilo Natera, in the state of Zacatecas, they were transferred to petri dishes via ampicillin-ampicillin-rifampin-PCNB and hymexazol (PARPH), potato dextrose agar (PDA) and water-agar culture media. The organisms that grew on leaves, stems and seeds were identified using taxonomical codes. The fungi found were Alternaria solani (21% in healthy plants and 41% in diseased plants), Fusarium roseum (10.2% in healthy plants and 16.1% in diseased plants), Phytophthora capsici (0.6% in healthy plants and 3.7% in diseased plants), Nigrospora spp. (0.7% and 1.7%), Aspergillus spp. (0.6% and 1.7%) and Penicillium spp. (0.2% and 0.1%), respectively, as well as saprophytic bacteria (2.5% in diseased plants). In seeds from diseased plants, there was no fungal growth found 43.2% of the plantations sampled and in healthy seeds there were saprophytic fungi (in 20%). Alternaria solani (13.5%), Aspergillus spp. (20%) and Fusarium spp. (3.3%). Based on the symptoms these pathogens cause on vulnerable plants, they were assumed to be related to the disease "dog's urine", but they do not participate directly in the production of the symptoms.

Keywords

Alternaria spp., Capsicum annuum, blight, disease, fungus.