Turkish Journal

of

Agriculture and Forestry

Keywords
Authors

agric@tubitak.gov.tr

Scientific Journals Home Page

Turkish Journal of Agriculture and Forestry

The Relationship between Black Point and Fungi Species and Effects of Black Point on Seed Germination Properties in Bread Wheat

Faruk TOKLU[1], Davut Soner AKGÜL[2], Mehmet BİÇİCİ[2], Tolga KARAKÖY[3]
[1]Çukurova University, Vocational School of Kozan, Department of Technical Programmes, Seed Science Programme, 01500 Kozan, Adana - TURKEY
[2]Çukurova University, Faculty of Agriculture, Department of Plant Protection, 01330 Adana - TURKEY
[3]Çukurova Agricultural Research Institute, Doğankent, Adana - TURKEY

Abstract: This study was undertaken to investigate the relationship between some fungi species and black point incidence and the effect of black point on seed weight, germination percentage, seedling emergence, seedling establishment, number of embryonic roots, and coleoptile length under field conditions in bread wheat. In this research, black-pointed and black point-free kernel samples of 5 bread wheat cultivars, namely Ceyhan-99, Doğankent-1, Yüreğir-89, Seyhan-95, and Adana-99 - commonly grown under the agroclimatic conditions of Çukurova Region, were used. Isolations from the black point-affected and black point-free kernels indicated that Alternaria spp. are the predominant fungi, followed by Chaetomium sp and Aspergillus niger. Epicoccum sp and Sclerotium sp were of minor importance. Discoloured kernels were heavier than normal ones. Germination percentage, seedling emergence, and seedling establishment under field conditions were reduced by the black pointed seeds, whereas number of embryonic roots and coleoptile length were not affected by black point.

Key Words: Bread wheat, black point, fungi, germination

Turk. J. Agric. For., **32**, (2008), 267-272.
Full text: pdf
Other articles published in the same issue: Turk. J. Agric. For.,vol.32,iss.4.