EFFECT OF MELOIDOGYNE GRAMINICOLA ON ROOT GROWTH OF WHEAT AND SORGHUM

M.H. SOOMRO AND N.G.M. HAGUE

Department of Agriculture, University of Reading, P.O. Box 236, Reading, RG6 2AT, England.

Abstract

Root growth of wheat cv. HD2189 and sorghum cv. TEK155R seedlings inoculated with *Meloidogyne graminicola* was studied under glass house conditions. Two week old seedlings were inoculated with 2000 juveniles per plant and the effects were measure at 10 and 20 days after inoculation. Overall growth of both the plant species was effectively reduced by nematode invasion but sorghum suffered greater loss than wheat, total root length of sorghum was reduced by 67% as compared to 54% reduction in wheat 20 days after inoculation. Some clumping of laterals around the invaded site occurred but the infested roots of wheat continued to elongate, however, sorghum roots upon invasion twisted and ceased elongation. It was evident that *M. graminicola* can slow the production and elongation of roots thereby reducing total root length of plants.