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Response of improved durum wheat (*Triticum durum L.*) varieties to wheat stem rust in central Ethiopia

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Wheat stem rust caused by *Puccinia graminis* f.sp. *tritici* is amongst the biotic factors which causes up to 100% yield loss during epidemic years. Therefore, the present study was carried out to observe the reaction of improved *durum* wheat varieties to virulent stem rust isolates at seedling growth stage and to stem rust population at adult growth stages. The finding of this experimental study was based on isolation and multiplication of virulent races of *P. graminis*, then ten *durum* wheat varieties including the susceptible check Morocco were tested for the virulent isolates at seedling growth stage and the reaction of these varieties under natural field conditions were evaluated in the Eastern and Western Showa of Central Ethiopia at adult growth stages. At seedling growth stage, 60% of varieties tested with the virulent stem rust isolate from Debrezeit exhibited resistance, while all varieties were resistant to Ambo isolate. Ten durum wheat varieties evaluated at adult plant growth stage to stem rust population of Debrezeit (Eastern Showa) showed severities of 20S in the variety Geredo to 70S in the variety Foka, while at Ambo (Western Showa) only the susceptible check, Morocco was infected up to 20S. The result indicated that stem rust from Debrezeit was virulent to *durum* wheat varieties as compared to the Ambo population.

Biography

Abiyot Lemma Gutema has completed his BSc in Dryland Crop Sciences and MSc in Plant Pathology. He has an experience of working as Agricultural Technical Vocational Education Training College Instructor; Highland Cereal, Pulses & Oil Seed Crops Production Farm Head; and Pathologist Researcher in the Ethiopian Institute of Agricultural Research & Sugar Corporation. He is currently working as an Agricultural Training Expert in the Japan Tobacco International Ethiopia, Ethiopia.

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