

WEEKLY NEWS WRAP

WHEAT RUST

New wheat stem rust variant confirmed in SA

A new stem rust type has been confirmed in South Africa by the Agricultural Research Council (ARC)-Small Grain Institute in Bethlehem in collaboration with the University of the Free State (UFS). According to Dr Tarekegn Terefe, a senior researcher at the institute, three stem rust isolates collected from wheat near Bethlehem were found to be different in their virulence profile from previously known stem rust types. The new stem rust isolates were collected by ARC researchers during the annual rust survey in 2017.

“Further analyses of these isolates confirmed that they belong to a new stem rust type known as PTKSK,” he said.

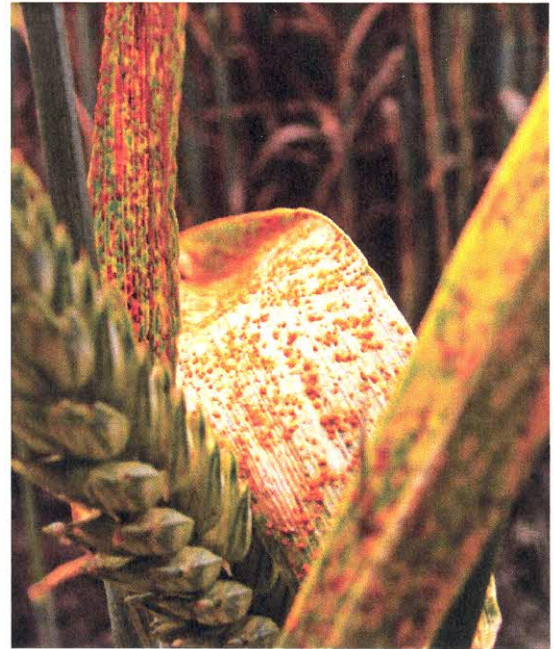
As one of 13 Ug99 variants, PTKSK had also been reported in other countries, including Ethiopia, Kenya and Yemen.

Ug99, a highly virulent stem rust type, was discovered in Uganda in 1999. During the past 18 years, it had evolved into various strains, some of which had overcome important resistance genes. Ug99 variants now occurred in 13 wheat-growing countries, including Kenya, South Africa, Yemen and Iran.

According to Terefe, the discovery of PTKSK brought the number of Ug99 variants in South Africa to five.

“PTKSK has not been detected in any of the 40 samples collected in the Western Cape in 2017, where stem rust regularly occurs. Stem rust samples collected in 2018 are being pathotyped and the results will be communicated to stakeholders as soon as available,” he said.

Existing South African commercial wheat cultivars



ABOVE: New stem rust variants continue to emerge in South Africa, according to a senior researcher at the ARC-Small Grain Institute, Dr Tarekegn Terefe.

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and breeding lines were tested against PTKSK at the UFS. The results indicated that PTKSK should not pose a significant threat to local wheat production.

“However, its detection indicates the continued emergence of new rust variants in South Africa and emphasises the importance of sustained stem rust surveillance in the country,” Terefe said. – *Annelie Coleman*