

## **Wheat stripe rust reported from Zimbabwe for the first time**

During September 2018 severe stripe (yellow) rust infections were observed by Dr Tegwe Soko (a wheat breeder from Seed-Co International) and Nyasha Chiuraise (cereal pathologist from Seed-Co International) on irrigated wheat planted at different trial sites in the Highveld region (>1200 metre above sea level) close to Harare as well as on commercially planted wheat near Chegutu in Zimbabwe. According to available information the disease has never been observed in Zimbabwe. The Global Rust Reference Centre in Denmark, which curates historic stripe rust isolates collected from all over the world, confirmed that it has no record of the disease occurring in Zimbabwe. Analysis of the Zimbabwean stripe rust isolates has shown that the race is different and more aggressive from those known to occur in South Africa. However, based on its pathogenicity towards certain key resistance genes, similarities have been shown with stripe rust races known to occur in Rwanda, Tanzania and Ethiopia.

At present the race has not been detected in South Africa and it is not known whether it will spread in a southerly direction or even survive the summer in Zimbabwe. However, examples of similarities in stem and leaf rust races between these neighbouring countries are well known and rusts are notorious for wind-blown, transboundary dispersal. Should stripe rust re-emerge in 2019 in Zimbabwe, South African wheat farmers and researchers are urged to be alert for stripe rust signs and symptoms on their wheat crops. Several stripe rust races detected in other parts of the world have been shown to be adapted to warmer conditions. In addition to this acclimatisation, wheat cultivars currently classified as resistant to stripe rust in South Africa may be under threat from the Zimbabwean race. Plant pathologists from the Agricultural Research Council-Small Grain at Bethlehem and University of the Free State in Bloemfontein are monitoring the situation and work in close collaboration with wheat researchers from Seed-Co International to determine the risk for wheat production in both countries.

**Compiled by: Zak Pretorius, Willem Boshoff, Tegwe Soko and Tarekegn Terefe**