Resistance screening of wheat (*Triticum aestivum* L.) landraces to multiple biotypes of Russian wheat aphid, *Diuraphis noxia* and their yield potential through use of microsatellite markers

Russian wheat aphid (RWA) *Diuraphis noxia* (Kurdjumov) has gained attention in SA as an aggressive pest of wheat since the discovery of the first biotype in 1978. Currently, four different RWA biotypes are known and were reported to occur in SA i.e. RWASA1, RWASA2, RWASA3 and RWASA4. RWA biotypes are resistance-breaking pest populations weakening plants containing specific gene(s) rendering them susceptible although they were previously resistant. They vary from one another through virulence profiles against different wheat cultivars with different resistant genes. The cereal pest feeds on leaves, stems and developing kernels Leaf rolling, white or yellow longitudinal leaf stripes, purple discolouration, head trapping and underdeveloped growth describe the damage symptoms from the RWA invasion. This poster reports on the diversity of wheat landraces with regard to their resistance to RWA multiple biotypes and the possibility of wheat yield traits on the genotypes.

Keywords: Wheat landraces, Russian wheat aphid, Resistance, Diversity, Yield.