



Wheat Germplasm Characterization for Identification of Effective Sources of Resistance to Yellow Rust (*Puccinia striiformis* f. sp. *tritici*) under Temperate Conditions of Kashmir Valley.

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Abstract: Stripe rust of wheat (*Triticum aestivum* L.) caused by *Puccinia striiformis* f. sp. *tritici* is an important disease in India. It occurs regularly in severe form in North Western plain zone (NWPZ), North Hill zone (NHZ) and Southern Zone (SZ). In NHZ, particularly in the foothills of Kashmir division of J&K, the virulent races of stripe rust has been found threatening to quality and production of wheat. However, identification of the stripe rust race(s) prevalent in the area would help in initiating an effective rust breeding programme and designing a long term strategy for control of stripe rust where presently no protection is existing against the present races of wheat stripe rust. Thus current study is being conducted under DBT- funded Network Project on wheat entitled “**Germplasm characterization and trait discovery in wheat using genomics approaches and its integration for improving climate resilience, productivity and nutritional traits**” to evaluate a large diverse set of germplasm comprising of 4560 genotypes including checks (PBW343, HD2733, PBW752, PBW757, HD2932) in temperate conditions of Kashmir valley, in Year 2020-2021 at FOA, SKUAST-K, Wadura, in Augmented Block Design (ABD).

