Control of Rust Diseases by Resistant Varieties

Recognize the problem
Losses are often severe (50 to 70%) over a large area and individual fields can be totally destroyed by susceptible varieties to rust diseases.

Background
Wheat is a strategic crop in Afghanistan and important to country farmers. Serious damage to wheat has been recorded due to infection by rust diseases (leaf rust Puccinia recondita, Yellow rust Puccinia striiformis and stem rust Puccinia graminis). Use of resistance varieties can result in maximum yields whilst avoiding rust diseases.

Management
Yellow Rust: The appearance of yellow streak (pre-pustules), followed by small, bright, yellow elongated uredial pustules arranged in conspicuous rows on the leaves, leaf sheaths and glumes.

Leaf Rust: Circular or oval, orange pustules on the upper surface of infected leaves. Pustules are more scattered and larger in size compared to stripe rust.

Stem Rust: Uredinia are orange to dark red in colour and form on both surfaces of leaves. They are elliptical to elongate and are larger than those of leaf and stripe rusts. As wheat ripens, the uredinial stage turns into a new stage known as the telial stage.

Resistance Varieties

1. Kabul 013
2. Chonte#1
3. Koshan 09
4. Baghlan 09
5. Mukqawim 09
6. Lalmi04

Scientific name(s) > Puccinia spp.

The recommendations in this factsheet are relevant to: Afghanistan, All Countries

Authors: Muhammad Rafi Bawari
ARIA, Kabul Badam Bagh PPQD MAIL
tel: 00 93 771090445 email: muhammadrafibawari@gmail.com

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