

Spore contamination of *Tilletia tritici* in seed lots as affected by field disease incidence

A. BORGEN¹ AND L. KRISTENSEN²

¹Agrologica, Houvej 51, DK-9550 Mariager E-mail:borgen@agrologica.dk

²Ellemosevej 20, Hellerup, Denmark. E-mail: larsfk@webspeed.dk

Summery

Seed lots normally become contaminated by spores of the seed borne common bunt (*Tilletia tritici*) during harvest of fields with infected plants. To demonstrate the relation between the number of infected plants in the field and the resulting number of spores in the harvested seed lot, a fixed number of infected tillers were placed in uncontaminated wheat fields. Two field experiments show that the number of spores in the seed lot is proportional to the number of infected plants in the field. Only 3% of the spores from the infected plants in the field end up in the seed lot after harvest with a combine harvester. However, only few spores in a seed lot is enough to establish infection in the next year field, and with a threshold of 10 spores/g seed which is the current threshold for untreated seed in Denmark, less than 1 infected tiller per 1000 m² can be accepted in a field aimed for propagation.

, Houvej 51, DK-9550 Mariager E-mail:borgen@agrologica.dk

emosevej 20, Hellerup, Denmark. E-mail: larsfk@webspeed.dk