

HESSIAN FLY RESISTANT WHEAT VARIETIES

Reduce wheat losses due to Hessian fly and increase yield

TECHNOLOGY / SOLUTION



These wheat seeds are an improved variety that combines more than 26 genes resistant to the Hessian fly that were identified in common, durum and wild wheat have been incorporated into local high-yielding varieties.

Wheat resistance to Hessian fly comes from natural genes that activate a biochemical defense response when larvae feed on plant leaves and stems. By combining different resistant genes, improved varieties are able to effectively overcome the genetic mutations that are common in Hessian fly populations.



PROBLEM / ISSUE SOLVED

- The Hessian fly is an insect pest of wheat, causing substantial yield reductions in grain and straw
- The insect is characterized by high genetic variation among fly populations (three to five major generations of flies each year), which allow it to quickly adapt to certain wheat resistance genes
- The insect pest has spread across all major breadbasket areas of Eastern and Southern Africa



GOOD FOR
Small-scale farmers,
Commercial farmers

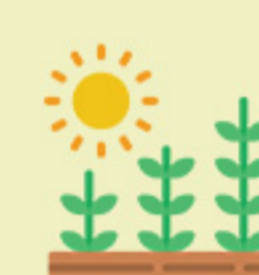


BENEFITS

- ✓ Increases grain and straw yields by protecting 79% to 100% of plants from pests
- ✓ Reduces insecticide usage and subsequently, production costs and negative effects on the environment and non-targeted organisms
- ✓ A financially attractive solution for farmers in all major breadbasket areas of sub-Saharan Africa, as it ensures stable, increased production that return the investment in certified seeds



Pest Management
Speciality



Wheat
Commodity

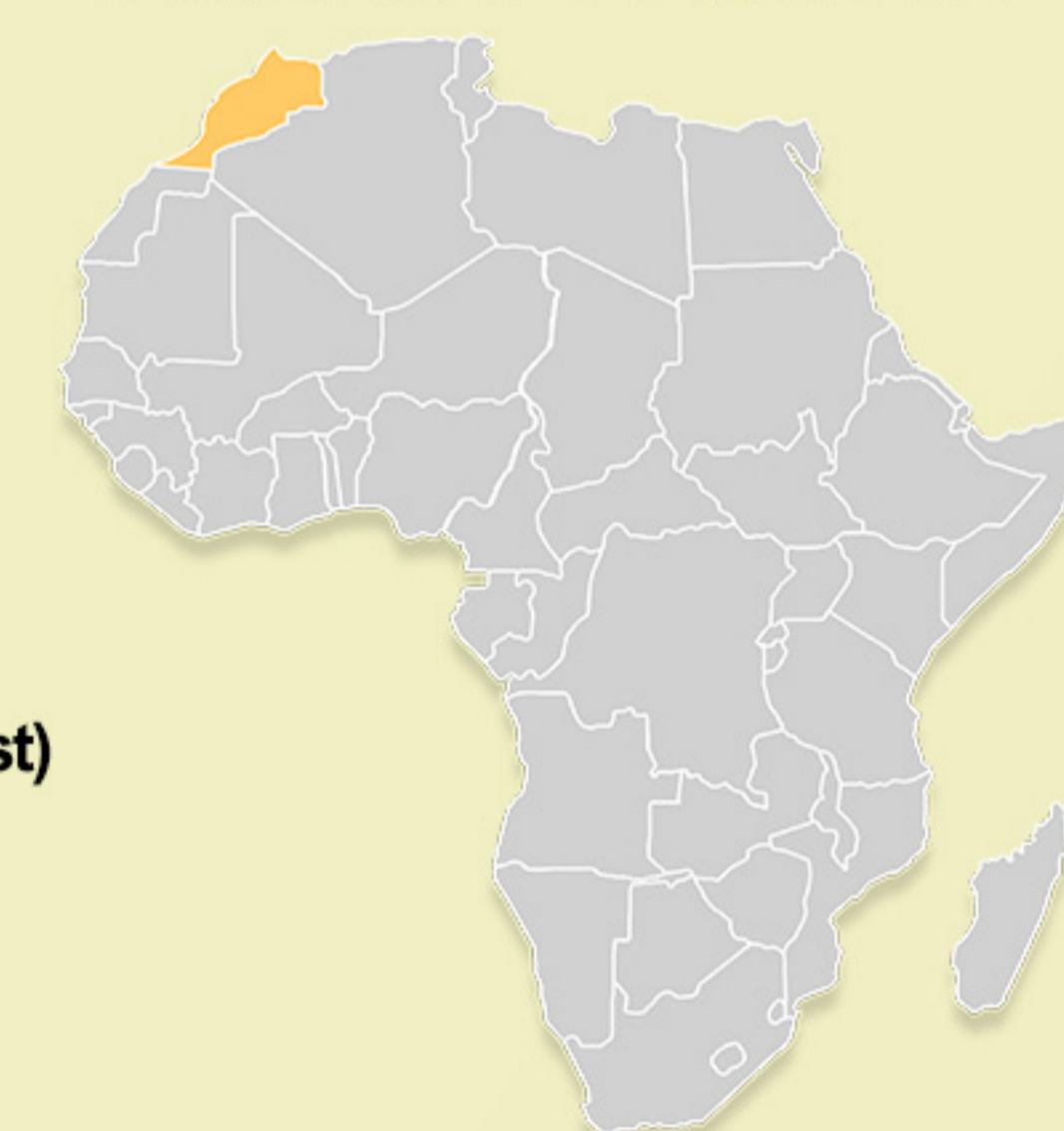


US\$35 - 43 / ha (seed cost)
Purchase price



5.5 - 7.1 tons/ha
increase in yield
Added value

ALREADY IN USE IN



Morocco

HOW DOES IT WORK?

Planting density and mineral fertilizer application for Hessian fly resistant wheat varieties follow local recommendations as for other cultivars.

To ensure high yields and thus, profitability, it is necessary to adopt complementary practices such as planting at optimal dates, the removal of plants that can provide shelter for insects or "green bridges", and the use of insecticides.

