Heat and Drought Tolerant Wheat Varieties

Wheat cultivation in high temperature regions

These wheat varieties mature in 90 days, withstand temperatures 4°C above normal, maintain 75% yield under extreme conditions, resist diseases like yellow stem rust, and have high water use efficiency. They also good for bread flour with a protein content of 14-15%. Ideal for challenging environments like Sub-Saharan Africa.



Science for resilient livelihoods in dry areas

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Saharan Africa.			
This technology is <u>TAAT1 validated</u> .	7.8	Scaling readiness: idea maturity 7/9: level of use 8/9	ProPAS
Gender assessment	Climate impact	47	Commodities
roblem Heat Stress: Yield loss due to temp higher than normal. Drought Conditions: Poor perform than 200mm of moisture. Low Productivity: Traditional variet less than 6 tons/ha. Limited Cultivation Zones: Unsuita temperatures and low rainfall areas	beratures 4°C ance with less ies yield much ble for high	e: Withstand temperatures 4°C nal. ance : Perform well with less th ture. Achieve up to 6 tons/ha. t ivation Areas : Suitable for hig low-rainfall regions	an Sustainable Development Goals Sustainable Development Goa
 Key points to design your program This technology: Combats challenges like heat stress, drought, and limited water in wheat farming. It promotes faster harvests with 90-day varieties. Its supports SDGs on food security, climate resilience, and water efficiency, and works with other innovations in the Wheat Innovation Toolkit of TAAT. Ideal for improving food security and sustainability, this solution is backed by ICARDA to ensure successful implementation across Africa. 			Best used with • <u>Wheat Cultivation in</u> <u>Dryland through Winter</u> <u>Irrigation →</u> • <u>Furrow Irrigated Raised B</u> <u>Wheat Production →</u> • <u>Yellow Rust and Stem Rus</u> <u>Resistant wheat →</u> Tested/adopted in
4 - 6 tons/ha increase in yield	Cost: \$ 100 kg/ha Planting rate	DIP Unknown	Tested & adopted Adopted Tested Testing ongoing Where it can be used
Heat and Drought Tole			This technology can be used in the color agro-ecological zones.