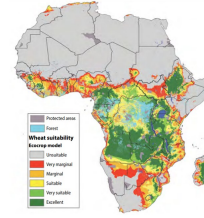


# Heat and Drought Tolerant Wheat Varieties

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

**International Center for Agricultural Research in the Dry Areas (ICARDA)**  
Zewdie Bishaw

This technology is **TAAT1 validated**.
 Scaling readiness: idea maturity: 7/9; level of use: 8/9

Cost: \$\$\$

**4 - 6 tons/ha** increase in yield

**100 kg/ha** Planting rate

IP Unknown

**Problem**

- Heat Stress:** Yield loss due to temperatures 4°C higher than normal.
- Drought Conditions:** Poor performance with less than 200mm of moisture.
- Low Productivity:** Traditional varieties yield much less than 6 tons/ha.
- Limited Cultivation Zones:** Unsuitable for high temperatures and low rainfall areas

**Solution**

- Heat Tolerance:** Withstand temperatures 4°C higher than normal.
- Drought Resistance:** Perform well with less than 200mm of moisture.
- Higher Yields:** Achieve up to 6 tons/ha.
- Expanded Cultivation Areas:** Suitable for high-temperature and low-rainfall regions.

## Key points to design your business plan

This technology is beneficial for three main groups: multipliers, resellers and farmers:

For Multiplier, to succeed, source seeds from specified countries, navigate transportation efficiently, and adhere to licensing regulations.

For Resellers, efficiently source seeds, transport, and store them to succeed. Target small retailers, development projects, producers, and cooperatives.

For Users, partner with sellers and estimate potential profits.

Gender assessment

Climate impact

Technology from

ProPAS

Commodities

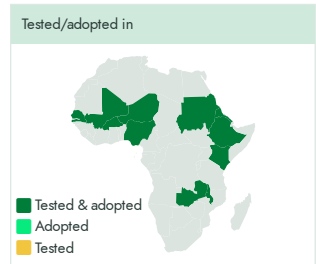
Wheat

Sustainable Development Goals

Categories

Production, Improved varieties, Drought tolerance, Heat tolerance

- Best used with
- [Expanded Production of Irrigated Wheat >](#)
  - [Furrow Irrigated Raised Bed Wheat Production >](#)
  - [Yellow Rust and Stem Rust Resistant wheat >](#)



Where it can be used

This technology can be used in the colored agro-ecological zones.