



#29G-19 Transgenic wheat with enhanced tolerance to drought stress

Wheat is one of the most broadly produced grains worldwide, together with corn and rice, amounting to **713 million tons annually**. The FAO has estimated production growth at 1.3% annually, due to larger planted areas and improved yields.

Nonetheless, the impact of climatic variables on wheat production entails economic risks. **The productivity of arable areas is frequently impaired by water deficit** in the critical stages of crops, with the economic losses linked to variations in the frequency and intensity of rainfall.

The INTA Genetics Institute (IGEAF) developed a **transgenic wheat event with enhanced drought tolerance** using genome-editing tools.

ADVANTAGES:

- Drought-tolerant crop.
- Capacity to normalize yield fluctuations due to climatic variabilities.
- National development of the transgenic event.

TECHNOLOGY READINESS LEVEL: MIDDLE. This product completed field tests, following the applicable Biosafety requirements in 5 consecutive seasons, with relevant results in all instances. INTA participants: EEA Bordenave, EEA San Juan and IGEAF. **The molecular strategy of this development is patent protected (WO 2012/007919A1).**

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