# HB4 Drought-Tolerant Wheat — Licensing a CONICET–UNL Sunflower Gene to Bioceres, from World-First Approval to a Struggling Rollout

City Innovation Library · Good practice · Argentina

Quality score: 57/100

Evidence strength: Moderate


### *Summary*

Raquel Chan's CONICET–UNL lab licensed the sunflower HaHB4 gene to Bioceres. In 2020 HB4 became the world's first approved drought-tolerant GM wheat, and the US cleared it in 2024. Trials showed +6% yield, but uptake stalled and Bioceres left seed production in 2026.


### *Key dimensions*

| Dimension | Score |
|---|---|
| Evidence of impact / measured results | 2/3 |
| Transferability / demonstrated replication | 2/3 |
| Scalability | 1/3 |
| Sustainability / continuity | 1/3 |
| Innovation | 3/3 |
| Inclusiveness / equity | 1/3 |
| Multi-stakeholder collaboration | 2/3 |

Evaluated by C-NAPSE

### *Data sources*


C-NAPSE web research — accessed 2026-11-14

Instituto de Agrobiotecnología del Litoral (CONICET–Universidad Nacional del Litoral) with Bioceres Crop Solutions — accessed 2026-11-14

CONICET — US approves cultivation of CONICET-developed drought-tolerant wheat — accessed 2026-11-14

González et al. 2019, Journal of Experimental Botany (doi:10.1093/jxb/erz037) — accessed 2026-11-14

Buenos Aires Times — GMO wheat developer plunges amid setbacks (2024) — accessed 2026-11-14

El Cronista — Bioceres exits seed production (2026) — accessed 2026-11-14

Bichos de Campo — 55,000 ha of HB4 wheat in 2021 — accessed 2026-11-14



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