

# Hordeum Chilense

Tritordeum's mother

# Introduction

***Hordeum chilense* is one of many wild relatives of barley. (*Hordeum vulgare*)**

**Hordeum chilense, also known as Chilean wild barley, is a diploid species of wild barley native to Chile and Argentina.** It has gained attention in agricultural research due to its valuable traits that are beneficial for crop improvement, particularly in barley and wheat breeding programs.



# Introduction

## Key characteristics:

- **Botanical Name:** *Hordeum chilense* Roem. & Schult.
- **Common Name:** Chilean barley
- **Family:** Poaceae
- **Chromosome Number:** *Hordeum chilense* is a diploid species, meaning it has two sets of chromosomes ( $2n = 14$ ).
- **Genom:** HchHch



# A Resilient Species

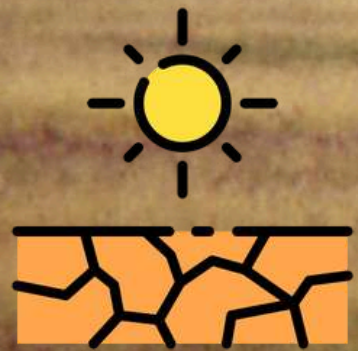
***Hordeum chilense* is a very robust species.**

**This species is known for its resistance to diseases like *Septoria tritici* blotch and its high seed yellow pigment content,** which makes it a promising candidate for improving crop resilience and nutritional quality.

*Hordeum chilense* collected in Chile  
Vivagran collection

# A Resilient Species

Typical traits of *Hordeum chilense* include tolerance to:



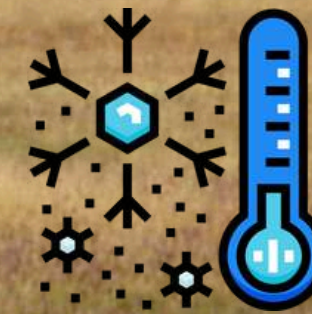
Drought



Diseases



Salinity



Cold



Poor Soils

# Ecosystem

***Hordeum chilense* typically grows in semi-arid to arid regions**, often in disturbed soils or areas with low fertility. Its natural habitat includes grasslands, scrublands, and open spaces at various elevations.

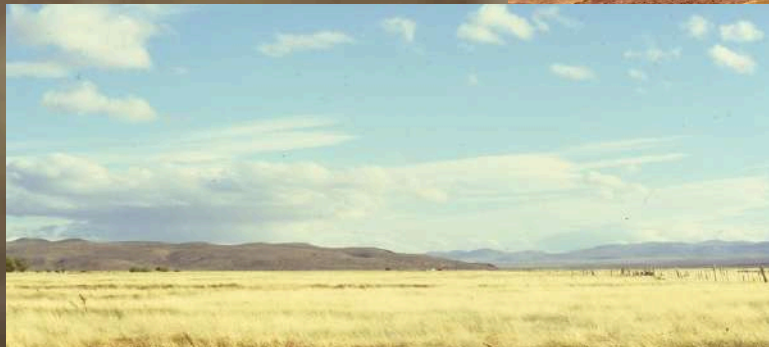
# Ecosystem



Volcano Llaima



Lonquimay (4.200 m)



Patagonia



Rio Grande - Tierra de Fuego



Puerto Natales - Pacific coast



Temuco



Provincia de Santiago



Puerto Saavedra



Ibañez river



*Hordeum chilense*  
grows in a wide  
array of  
ecosystems

photographs from expeditions to Chile to collect *Hordeum chilense* in 1980's - Vivagran Collection

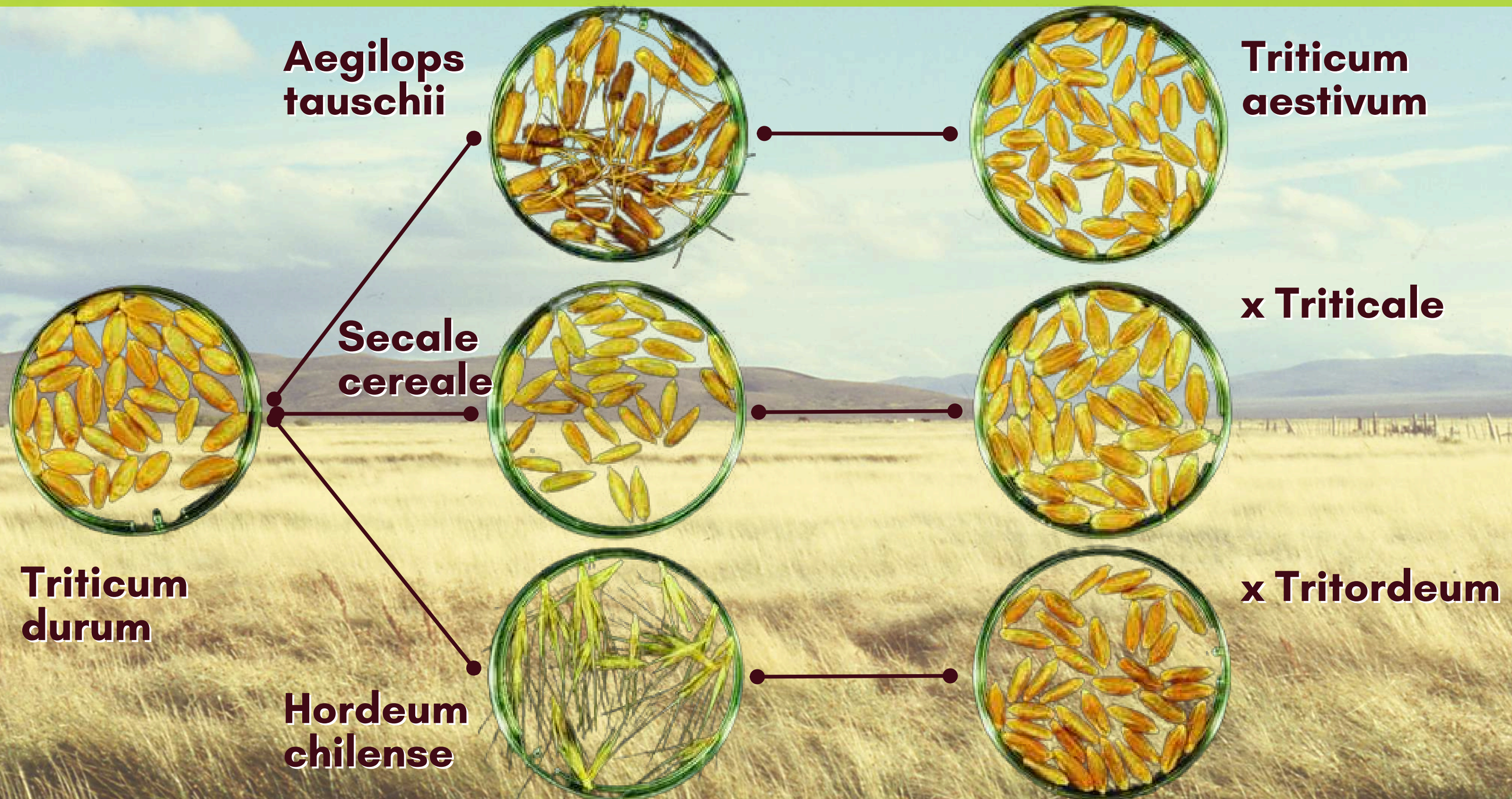
# Genetic Resource

***Hordeum chilense* is valued for its genetic traits.**

**These traits make it a valuable resource for improving cultivated barley and wheat through hybridization.** The resulting hybrids may possess beneficial traits such as increased disease resistance or improved adaptability to harsh growing conditions.



# Genesis of Tritordeum



# Genesis of Tritordeum

***Tritordeum* is the first cereal to successfully combine *Hordeum chilense* with a modern crop, durum wheat, producing a resilient and technologically advanced hybrid.**

**Discover more at: [www.tritordeum.com](http://www.tritordeum.com)**