

# **BREEDING & TESTING**

The area of Breeding & Testing comprises three specialized teams: Germplasm (seed management), Field Testing, and Stewardship & Compliance.

The association among these three areas and others within INDEAR let us to provide a wide range of services, from technology validation in breeding chamber, greenhouse and field conditions, through management of regulated material up to deregulation, and development of new varieties for commercialization.

#### TRAIT INTROGRESSIONS

In search for new materials combining desired trait, we carry out molecular marker-assisted backcross and forward breeding strategies in different crops (soybean, wheat, safflower, and alfalfa).

Backcrosses enable the introduction of desired features from a parental donor to another material with proven performance (recurrent parent).

Breeding procedures are speed up by off-season activities carried out in greenhouses and breeding chambers, thus allowing a faster attainment of advanced generations of new lines.



## **BREEDING CHAMBER, GREENHOUSE AND FIELD TRIAL**

Efficacy evaluations under controlled conditions are carried out in breeding chamber and greenhouse during the early development phase of a new product. Once this stage is completed, efficacy is confirmed developing plot scale-field trials under different environments. Our main field Station is located in Pergamino, others 8-10 locations are covered by the Field Testing Team. Trials include the analysis of comparative performance (preliminary or advanced varieties), agro-phenotype, differential management (seeds treatment; sowing dates, density and spacing; fertilization, etc.).









### **SEED AND GRAIN INCREASE**

Seed production plans involving rows, plots and small areas (1-10 has) are carried out ensuring seed purity by molecular markers and phenotype segregation. Our seed processing station in Pergamino is capable of processing 180 bags/day of wheat and 240 bags/day of soybean (40 kgs each).







## **OTHER TRIALS**

Dose-response studies for evaluation of phytosanitary products are performed in chamber or greenhouse (mainly herbicides).