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Breeding non-GM soybean for agro-industry use at the National Institute of Agricultural Technology (INTA) in Argentina

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In the last 30 years, Argentina has been developing and applying one of the most efficient extensive production systems of agriculture thanks to the fertility of its soils, the goodness of its climate and the application of a set of technologies including genetics, agrochemicals, software, biotechnology and machinery, that capitalizes the benefits of the environment and expresses them in high productivity of grains. This productive system – with soybean cultivation as its main axis – due to its efficiency, profitability and low relative costs, has led to the limit the expansion of the country's agricultural frontiers. This scheme, based on commodities, generates income from the export of low quality protein grains and industrial by-products (flour and oil) with little transformation, without differentiation and relatively low value in the international markets. The development of new technologies to produce soybean grains with different qualities for specific markets has become a challenge. INTA Experimental Stations in Marcos Juárez and Paraná are approaching the development of non-GMO cultivars, with a good sanitary profile, phenologically, productively and industrially according to specific demands of national and international markets. Activities have recently begun to be developed within the framework of a Technological Linkage Agreement with MBS Agroindustria SRL, which, in addition to strengthening breeding activities, allows seed marketing and the process of soybean grain to produce protein concentrates destined.