

Title "Silobag": evaluation of a new technique for temporary storage of wheat in the field.
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Abstract

During the past five years, Argentine farmers have faced a shortage of storage capacity and high costs of sending grain to the elevator during the harvest. To reduce costs and get some extra profit through grain segregation, farmers in increasing numbers are choosing to store grain in the field in 67-m long plastic 'silobags', each holding approximately 200 tonnes of grain. During 2001, more than 1.5 million tonnes of maize, soyabeans and wheat were stored this way, and it is expected in the coming years that this will increase to approximately 7 million tonnes. In January 2001 (summer) two bags were filled with wheat at 12.5 and 16.4% average moisture content. The grain was stored in the field for six months until winter. Temperature, moisture content, test weight, germination, baking quality, CO₂ concentration and insect activity were the main evaluation parameters. Wheat stored at 12.5% moisture content suffered no deleterious effects in any of the quality parameters during storage. Wheat stored at 16.4% moisture content was negatively affected with respect to baking quality and seed viability. There was no increase of the grain temperature due to self-heating, and no insect activity was detected during the storage period.