Technology

Precision Technology

Automatic Seed Analyzer

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#seeds | #precision |#vigor |#crops |#mini-lab |#quality|#silos

https://www.argentina.gob.ar/inta/tecnologias/analizador-automatico-de-semillas

This solution determines the germination power and vigor of seeds with 10-minute tests. The results are comparable with other tests and methods (such as the Tetrazolium test).

The equipment is a mini-lab used to determine the germination power and vigor of individual seeds. It is highly reliable and delivers immediate results. This Automated Seed Analyzer – called MiniLab SAD 9000-S – enables safe and expeditious decision-making, facilitating seed lot selection for sowing and storage control.

Capability to analyze large numbers of samples in 24 hours.

It studies numerous species: soy, cotton, wheat, sunflower, peas, lentils, peanuts and beans in general, among others.

A non-destructive method that allows subsequent comparison.

Development of proprietary quality patterns for new varieties.

The Automatic Seed Analyzer uses the Electrical Conductivity test in individual seeds to determine the germination vigor and potential. This estimation is used to diagnose the physical integrity or damages of any kind to seminal structures, whether due to insects, fungi or mechanical. Consequently, it facilitates decision-making regarding the curing and inoculation broth volumes, assessing the storage potential and ranking lots according to

emergence potential in adverse conditions. As one of its fundamental functions, the SAD 9000-S enables the expeditious quality assessment of the seeds stored in different silos, operating as an indirect indicator of frequent issues in bulk storage due to temperature increases caused by insects from mixed lots with different moisture contents. This information contributes in scheduling different silo transfer operations in advance, in order to find and select the most appropriate machinery for said tasks. The SAD 9000-S allows early detection of other post-harvest operations that may cause physical and/or physiological damages, like fumigation and application of treatment broths to the bulk seeds, as well as fungi infections with the subsequent formation of surface or internal hardening in the bulk seeds.

Transferred Product

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SAD 9000-S

LICENSEE/MARKETING COMPANY: CONSULTAR S.H.

Company in charge of disseminating the commercialization of this product: INTeA.

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