

Home > News & Media > News > Innovative ERGOVISION station is changing the way seed analysts work

Innovative ERGOVISION station is changing the way seed analysts work

Published: 05.05.09

The **Seed Laboratory at Oregon State University and Mater International, Inc.** have developed an improved 'Purity Inspection Station' that incorporates advanced optical, ergonomic and mechanical technologies to achieve fast and accurate testing. The new station increases efficiency by presenting a continuous and uniform flow of seeds to a choice of advanced optical systems such as a **Leica MZ6 Stereomicroscope**.

The ergonomics have not only made analysts more comfortable and efficient, but they have greatly increased testing productivity. Using the new Station the Oregon State University Seed Laboratory increased productivity from 20 to 30% with accuracy greater than or as good as older inspection methods.

Factors that contribute to ergonomics

The Ergovision Inspection Station is designed to reduce analyst's fatigue and discomfort during seed testing. The following are some **key factors** in the ergonomics of the new station:

- The analysts are able to **sit straight**, at a suitable chair height, without bending over, and they can breath normally.
- The **use of both eyes**, and the tilted microscope allow a **comfortable sitting position** for the analyst and provide good working conditions that reduce fatigue. In the traditional hand lens method, the analyst uses one eye.
- An advanced optical system produces a **3-D picture** with detailed features for the kind of seed under examination.
- The clarity and focus can be standardized easily. This is because the magnification and lighting can be set at one optimum level for all samples of a specific species. This decreases the possible variations due to equipment, individual skills, fatigue or other reasons.
- The **high quality fiber optic** light system contributes to viewing clarity, which **reduces eye strain**.
- Optics and light quality as well as **optimum magnification** provide clarity at all times. This enables the analyst to see clearly and make the right decision.
- The equipment has **simple controls** to manage with one hand. This makes it easy to operate so that the analyst can concentrate on distinguishing and identifying seeds.



Images courtesy Seed Laboratory at Oregon State University



Legend: *Echinochloa frumentacea*