# CHAMBER FOR RAPID AND ACCURATE ANALYSIS OF SEED LIFE AND VIABILITY – Project No A03



Center for technology transfer

### **The Market Opportunity**

Seeds constitute the back bone of agriculture production. For manufacturers and distributors it is important to know the viability and productivity and longevity of seeds, which can save them both time and money.

Researchers from the University of Belgrade have developed a new methodology of determining seeds viability and aging, which provides various advantages.

#### **The Invention**

This new method for seeds viability uses combination of thermal imaging technology in a chamber programmable environmental conditions and the quantification of visual information together with selective non-invasive testing methods. Collected measured parameters values of the environment and seeds are used to quantify the viability status of seeds and the life assessment analysis.

This system benefits from several advantages:

- it hugely reduces the time required to test for seed viability and lifetime usage;
- it provides more rapid and accurate analysis especially for aging of seeds that were stored for longer periods of time;
- it results in zero damage or destruction to tested seeds;
- it can measure a large number of parameters in a real time;
- it is inexpensive and flexible,
- It can be used for detecting the genetically modified seeds (GMO"s);
- it can be used for detection of the seeds sex;
- it can determine the percentage of seeds in a lot that are tolerant to a herbicide (genetic purity) or it can be used to detect the absence of tolerance (adventitious presence);
- it can also be used for small-seeded species in determining the viability of un germinated seeds;

 it can be used for determining how well a seed lot will act under unfavourable conditions.

### **Project Status**

A prototype of this technology has been made and tested to examine seed life ability, and is the subject of new national patent application.

## **Research Group**

This technology was invented by researchers at the University of Belgrade Institute for Multidisciplinary Research.



#### **Commercial Status**

We are looking for potential licensees and collaborators to develop and commercialise the invention.

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## About Center for Technology Transfer

The Center for technology transfer was founded by the University Council of the University of Belgrade to identify, protect and commercialize the results of scientific research and intellectual property of the University of Belgrade.

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