

SPECIALIZED PERSONAL ASSISTANT TO THE HEAD OF THE NATIONAL GENBANK

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Abstract. *The National Gene Bank, which is part of Bulgaria's national security, was founded in 1984 with the aim of preserving the diversity of cultivated plant species and their wild relatives. It currently stores over 60,000 samples. In accordance with standards, the samples are subject to control checks every 10 years. Each control check is a multi-stage process involving various specialists. On average, about 6,000 control checks are carried out per month, which makes it very difficult for the head of the gene bank to monitor and control their implementation.*

This article presents an approach for building a specialized personal assistant (SPA-GB) designed to assist the manager of the national gene bank in managing control checks on stored samples. The need to develop SPA-GB as a multi-agent system is justified. The article describes the main functions of the assistant. A first version of the SPA-GB architecture, including its individual components, is presented in more detail. The program implementation of the SPA-GB is also discussed.

Key words: National Gene Bank, Plant Genetic Resources, Specialized Personal Assistant (SPA-GB), Multi-Agent System, Software Implementation

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