

Barcode-based Management System for Biological Resources

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Abstract:

The KCTC developed the "barcode-based management system for biological resources" to facilitate the efficient management of biological resources and related information, and applied it to the management of biological resources since 2007. In Korea, we have a program for management of bio-products produced from researches supported by the government. The KCTC is designated as a central depository for bio-products from researches supported by the MEST (Ministry of Education, Science & Technology). Biological resources are diverse in their types and produce in massive quantities, so a single institution can hardly manage all the research outcomes. The KCTC plays a central role in the methodical management of the bio-products from the research. It has also established a support service system to expand the application of the "barcode-based management system for biological resources" to provide an efficient integrated management solution connected to other institutions. The principal features of this support system are as follows: If any other biological resource management institution accesses a web framework service to the barcode based management system of the KCTC via the Internet and registers information related biological resource, the KCTC will assign a unique barcode number to the registered resource. In other words, the same info is connected to the Biological Resource Integrated Search System of the KCTC on a real-time basis, thus allowing the user to conveniently search the data of other organizations through the KCTC's website. The unique barcode number assigned by the KCTC can be applied to the biological resource management system of any institution; this will facilitate the standardization of resource/info management solutions with the central and connected institutions. Expanding the application of this system may lead to the use of this barcode-based management system for biological Resources as a standard model for the management of biological resources in Korea.

Key words: barcode, management, biological resources