

MINISTRY OF JIHAD-E-AGRICULTURE

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Investigation on current status of Iranian animal, poultry and honey bee gene banks, description of their qualitative and quantitative standards and information analysis

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Abstract

Establishment of gene bank is one of the most effective methods of animal genetic resources conservation, especially in endangered species. Optimal conservation of animal genetic resources and preservation of genetic diversity as national fund is one of the most important goals of establishing a gene bank. Collection of biological samples of different species, preparation and longtime preservation, breeds registration and using new techniques for conservation, survive and management of animal species are included the function of the gene bank. In this study, according to the legal duties of the Animal Sciences Research Institute(ASRI) based on Articles 10 and 17 of the Comprehensive Animal Husbandry Law in identifying, monitoring, registering and conservation of the animal genetic resources and genetic materials of the country's livestock, the current status of research stations as gene banks (Live and non-live) were examined. In the next stage, quantitative and qualitative standards for data entry and storage of animal gene banks for in vivo and in vitro conservation were prepared and according to the existing conditions and information obtained from the animal gene bank, data analysis was performed in this field and the necessary solutions to improve the management of animal genetic resources were presented.

A total of 8170 samples is stored in 24 live animal gene banks. These specimens are reproduced every year and some of the specimens are handed over to herds of people. The largest number of samples with 3500 samples was related to poultry and the lowest number with 18 samples is related to Bactrian camels.

Key words: Animal gene bank, In vivo conservation, In vitro conservation, Qualitative and quantitative standards