




**Малоизвестные виды
плодовых культур**
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Less Known Species of Fruit Crops

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Textbook presents the results of research and educational institutions and experts involved in the international network **AgroBioNet** oriented for the realization of international research, education and development program entitled "Agrobiodiversity for improving nutrition, health, and life quality" which solves the problems of preservation, assessment and use of traditional, less known, less-used and forgotten kinds of plants.

In this textbook are also presented results from the solution of research projects that has been supported by the Operational Programme Research and Development of the European Regional Development Fund:

ITEBIO ITMS 26220220115 Support of technologies innovation for special bio-food products for human healthy nutrition

TRIVE ITMS 26110230085 Development of International Cooperation for the Purpose of the Transfer and Implementation of Research and Development in Educational Programs

AgroBioTech ITMS 26220220180 Building Research Centre

BioFood ITMS 26220220115

RESUME

Svitlana Klymenko, Olga Grygorieva, Ján Brindza **Less Known Species of Fruit Crops**

Neglected and under-utilised crops are also known as isolated, abandoned, lost, local, minor, traditional, alternative, niche, or underdeveloped crops. Recently they referred as forgotten or smart food. These crops are domesticated plant species that have been used for centuries or even millennia like food, fibre, feed, oil or medicinal properties, but they have been reduced in importance over time owing to particular supply and use constraints. These can include, inter alia, poor dates before on foodstuffs, low nutritional value, low consumers' awareness and reputational problems (famine food or "poor people's food", sometimes due to the modernization of agricultural practices). As the demand for plant and crop changes (reevaluation or discovery of nutritional traits, culinary value, adaptation to climate change, etc.), neglected crops can overcome the constraints to wider production and uses. As a matter of fact, many formerly neglected crops are now globally significant crops.

Although the options for scaling up neglected crops for large-scale agriculture appear to be increasingly exhausted, many plant species have the potential to contribute to food security, nutrition, dietary and culinary diversification and health generation. They also provide environmental services. It is impossible to define what would constitute "proper" or "correct" levels of use; however, many neglected species are evidently underutilized relative to their nutritional value and productivity.

In the publications there is a description of 35 forgotten, less known and less-used fruit species, which don't take the form of monocultures, namely: *Asimina triloba* L. Dunal, *Cydonia oblonga* Mill., *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq., *Aronia Mitschurinii* A.K. Skvortsov et Maitul., *Berberis vulgaris* L., *Crataegus submollis* Sarg., *Crataegus pinnatifida* Bunge, *Sambucus nigra* L., *Prunus tomentosa* Thunb., *Lycium barbarum* L., *Rubus fruticosus* L. ex Dierb., *Lonicera caerulea* L., *Ziziphus jujuba* Mill., *Amelanchier alnifolia* (Nutt.) Nutt. ex M.Roem., *Viburnum opulus* L., *Castanea sativa* Mill., *Cornus officinalis* Siebold & Zucc., *Cornus mas* L., *Cornus kousa* F.Buerger ex Hance, *Schizandra chinensis* (Turcz.) Baill., *Elaeagnus multiflora* Thunb., *Maclura pomifera* (Raf.) C.K. Schneid., *Mespilus germanica* L. *Pseudocydonia sinensis* C.K. Schneid., *Sorbus domestica* L., *Prunus spinosa* L., *Chaenomeles* spp., *Diospyros virginiana* L., *Diospyros kaki* L., *Diospyros lotus* L., *Morus alba* L., *Morus nigra* L., and *Shepherdia argentea* (Pursh) Nutt.

The aim of the publication is to provide advice to all groups of farmers for their cultivation, distribution and uses for the preparing of various traditional and innovative food-stuffs and other products. Many species can also be used in organic farming.

In each species are presented the origin and species distribution, morphological and biochemical characteristics of the basic parts of plants, plant breeding and cultivation, significant varieties, fertility, utilization of plant parts in the food industry, traditional and modern medicine and other areas.

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