Эфиромасличные виды растений

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Essential Oil Plants

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Experts from V4 group and other partner institutions participating in the international project *FarmersEduca*

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Association of Farmers and Private Landowners in the
Transcarpathian Region, Ukraine

Center of Organic Production, Selenca,
Republic of Serbia

Textbook presents the results of research and educational institutions and experts involved in the international network **AgroBio*Net*** 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 Purpose of the Transfer and Implementation of Research and Development in Educational Programs

AgroBioTech ITMS 26220220180 Building Research Centre

BioFood ITMS 26220220115

RESUME

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Essential Oil Plants

The production of essential oils in certain regions of the globe is more or less differentiated depending on the composition of the local flora and the physical and geographical conditions suitable for the culture of certain plant species. Essential oils are raw materials for many industries. Most of the oils are consumed by the perfume and cosmetics industry. Many essential oils have medicinal properties and they used in medicine.

In Ukraine, currently an assortment of essential oils is very limited and doesn´t completely satisfy the needs of essential oil, perfume and cosmetics industry of the country. Out of 3000 identified species of essential oil plants just around 20 are cultivated in Ukraine, while in the world practice 200 kinds are used for production of perfumery and cosmetics. A significant amount of essential oils is imported to Ukraine from abroad, for which large amounts of money are spent.

Now, in connection with the economic recovery, it is important to expand the range of essential oils and create a raw material base for their production through research and involvement of possible zones of growing aromatic plants in Ukraine. Many species of aromatic plants are introduced into the conditions of the southern steppe of Ukraine. As a result of many years of research, their biological features and economically valuable features have been studied. Plants grown in this region have a satisfactory amount of essential oil of good quality.

The book summarizes the available information on morphology, biology, biochemistry and gives the main economic characteristics of 30 species of aromatic plants, such as *Ocimum gratissimum* L., *Ocimum basilicum* L., *Ocimum tenuiflorum* L., *Tagetes lunulata* Ortega, *Helichrysum italicum* (Roth.) G. Don., *Origanum vulgare* L., *Hypericum perforatum* L., *Dracocephalum moldavica* L., *Hyssopus officinalis* L., *Calendula officinalis* L., *Nepeta cataria* var. *citriodora* Beck., *Lavandula angustifolia* Mill., *Agastache foeniculum* (Pursh) Kuntze, *Majorana hortensis* Moench., *Melissa officinalis* L., *Monarda fistulosa* L., *Mentha piperita* L., *Artemisia balchanorum* Krasch., *Artemisia taurica* Willd., *Perovskia atriplicifolia* Benth., *Rosa damascena* Mill., *Matricaria chamomilla* L., *Ruta graveolens* L., *Thymus vulgaris* L., *Foeniculum vulgare* Mill., *Satureja montana* L., *Satureja hortensis* L., *Salvia officinalis* L., *Salvia sclarea* L., *Elsholzia stauntonii* Benth.

The value of these plants as a source of essential oil is given. Here are recommendations for the most effective timing of harvesting of plant raw materials and its practical use. The best ways of reproduction are offered. For each type are examples of use in the food industry, in folk and modern medicine, in everyday life.

The purpose of this publication is to give a description of perspective aromatic plants and recommendations for their cultivation, as well as the use of essential oils and floral raw materials. Many aromatic plants proposed for cultivation have decorative properties, a long flowering period, a pleasant aroma, frost and drought resistance. The use of plants containing phytoncides in the greening of settlements will´ve a healing effects for humans.

СОДЕРЖАНИЕ