

Sustainable Use of Plants of the Lamiaceae Lindl Family in the Southern Steppe Zone of Ukraine under Climate Change Conditions

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Family Lamiaceae Lindl., or Labiatae Juss., includes 250 genera and about 7.9 thousand species, of which a significant number of species are grown as essential oil plants, in particular, narrow-leaved lavender, peppermint, clary sage, medicinal sage, rosemary, savory, lemon balm, nereta, Monarda, hyssop and others. Vegetable raw materials and essential oil are used in perfume, cosmetics, pharmaceutical, food and other industries [1]. In the context of sustainable development, one of the essential principles of an ecological lifestyle is the use of natural vegetable raw materials and essential oils for aromatherapy, hygiene, and treatment. Such areas as eco-tourism, photo shoots in the fields of essential-oil-bearing plants, ecological apiaries are gaining significant popularity. Along with this, essential oil crops have an important agroecological significance. In particular, two - or perennial essential plants can be grown on unproductive stony lands, they protect the soil from wind and water erosion, and they also can be used for phytomelioration and phytoremediation on anthropogenically altered soils [2-4]. Cultivation of essential oil crops provides an increase in biodiversity in agroecosystems, air purification from pathogenic bacteria by releasing essential oil with antiseptic properties, aesthetic beauty during the flowering phase, are valuable honeybees.

Analysis of biological features and adaptive potential of *Lavandula angustifolia* Mill., *Mentha x piperita* L., *Melissa officinalis* L., *Nepeta transcaucasica* Grossch. as well as the demand for vegetable raw materials and essential oil on the world market indicates the prospects for their cultivation in the southern steppe zone of Ukraine in the context of climate change.

References

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