Abstract Oral

Monday 27th May

Section Natural Bioactive Compounds, Functional and Traditional Food Products

PROVING THE CHOICE OF CURATIVE PLANTS FOR OBTAINING ANTIOXIDANT COMPLEXES

Galina Simakhina¹, Nataliia Stetsenko¹, Nataliia Naumenko¹

¹National University of Food Technologies, 68 Volodymyrska St., Kyiv-01601, Ukraine

flam1@voliacable.com

This paper represents an analysis of wide range for curative plants, and also the technology of dry and condensed concentrates with maximal content of bioflavonoids, which are prescribed to both direct consumption and enrichment of traditional food environments.

Searching for the new plant sources of bioflavonoids and establishing the technologies of their extraction from plant raw (with a purpose to use them furthermore in obtaining of the wide range of antioxidant foodstuff) is the topical work, aimed at the protection of human organism from malignant external factors. It has thereby become the purpose of our researches.

The objects researched in this paper are the following plant raw materials: nettle leaves; red beet leaves; syzygium buds; oregano flowers; melissa flowers; peppermint leaves; pepper fruit; thyme leaves; salvia leaves; elder berries and leaves; black currant leaves; hypericum herb; birch buds; chamomile flowers; oak bark; immortelle flowers; calendula flowers; eglantine berries.

There was proved that the usage of curative plant raw material in different vegetation periods of its growth would allow (dependently on their purpose) to obtain the maximal concentrations of various polyphenol compositions – flavonoles, anthocyans, catechins. We also proposed the technology of complex procession of curative plant raw materials into dry and condensed bioflavonoid concentrates. The products which would be produced according to the new technology are open to competition because of their correspondence to all the modern criteria of quality and safety. This is a crucially important factor of Ukraine's membership in World Trade Organization. We foresee the constantly increasing demand on such products due to worsening ecological situation both in Ukraine and abroad.

KEY WORDS: anti-radical activity, polyphenol compositions, disintegration, extraction, vacuum-concentration