

## Essential Oils as Natural Complexes of Biologically Active Substances

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Essential oils are complex multi-component mixtures of volatile odorant and different in structure organic substances. Natural essential oils are widely used in perfumery, cosmetic, confectionery and food industries. As for medical industry limited variety of essential oils and their components (oils of peppermint, eucalyptus, anise, menthol etc) are used. Component composition of essential oils plays an important part in perfumery, main components whose content determines biological activity of medicinal preparations being of great interest for medical usage.

Essential oils combine antimicrobial, antiinflammatory, wound healing, expectorating, sedative, immunostimulating and some other pharmacological effects in their biological properties. It is well known that geraniol, citral, nerol, thymol, carvacrol and other terpenoids are responsible in large measure for antimicrobial activity of essential oils. The received data are concerned with chemical composition of essential oils of some species of *Thymus*, *Achillea*, *Artemisia*, *Ledum*, *Escholtzia ciliata*, *Ziziphora clinopodioides*, *Tanacetum vulgare* genus and allowed to correlate biological activity and component composition of essential oils. Essential oils containing aromatic phenols (thymol and carvacrol), terpenic ketones and alcohols (alscholtziaketone, dehydroalscholtziaketone, pulegone, menthone, thujene, ar-turmeron, cyclocourinon, n-mentha-1(7), 8(9)-dien-2-ol, show marked antibacterial and antifungal effect as well as polyacetylene combinations capillen and its derivatives). Wound healing and antiinflammatory properties are significantly expressed in hamazulen containing essential oils.