



VIRGINIA MALLOW (*SIDA HERMAPHRODITA* (L.) RUSBY) – PROPERTIES AND APPLICATION

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Virginia mallow (or Virginia fanpetals) belongs to the Malvaceae family and it originates from the Southeastern parts of North America. In the 20th century, the plant was brought to Europe, specifically to Ukraine, and then it was introduced in Poland (KASPRZYK *et al.* 2013).

Virginia mallow is mainly used in industry as biomass for energy generation and as a source of fibers or forage. It is a subject of interest to many researchers due to the fact that it is a fast growing plant with a high potential yield and the ability of multiple regrowth even after cutting. Highly adaptable to different climates and soil conditions indicate a potential increase in the area occupied by the species. It can be grown on the slopes of eroded areas, land which is excluded from agricultural use, on chemically degraded areas, also on dumps and landfills of garbage.

In the family Malvaceae, there are several species commonly used in medicine, such as *Sida acuta* Burm.f., *S. cordata* (Burm.f.) Borss. Waalk. or *S. cordifolia* L. and therefore the interest in the healing properties of Virginia mallow seems natural. Recent studies have shown that there is a possibility of the use of Virginia mallow as herbal material. Studies have shown that the extracts from seeds of *S. hermaphrodita* (L.) Rusby have caused

a decrease of viability and deformation of *Mycobacterium smegmatis* cells (LEWTAK *et al.* 2013). There are also studies about anticancer activity of *S. hermaphrodita* extracts against SiHa (human cervical cancer lines). Two tests (MTT and NR uptake) were used and the results showed absence of cytotoxic effect using MTT tests, and a slight cytotoxic effect using NR uptake (FRANT *et al.* 2013).

References

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