SAINFOIN - PERSPECTIVE CULTURE IN FORAGE PRODUCTION

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Sustainable development of country's agriculture is impossible without revival of efficient animal husbandry. Today reduction in livestock and decline in milk production, both in private farms and in the public sector, continues.

In order to stabilize and increase production of feed and livestock products, it is necessary to increase the yield of fodder crops, economic efficiency of their cultivation and improve their fodder value.

An important place in production of high-grade fodder is grasses. Among legumes crops the most common in Ukraine are alfalfa and clover, with which can sainfoin successfully compete.

The culture of sainfoin is not new, but the lack of knowledge by population about the biological and fodder values of this plant often hinders its introduction in production.

Sainfoin - a perennial forage and honey plant. In the culture only three types of sainfoin are used extensively: common sainfoin - *Onobrychis viciifolia Scop*; sandy - *Onobrychis arenaria D.C.* and Trans-Caucasian - *Onobrychis transcaucasica Khim*. In our country, the range of this culture cultivation coincides with range of alfalfa. However, due to the high drought and frost resistance, the area of its distribution can be much wider.

As a feed culture, sainfoin has a number of advantages. In dry conditions, while maintaining the correct technology of cultivating, by productivity it not only does not yield to alfalfa, but also surpasses it, providing a yield of green mass 25.0-40.0 t / ha or more, air-dry matter - 7.5-8 , 5 t / ha, seeds - from 0,8 to 1,6 t / ha. In 100 kilograms of green mass, sainfoin contains 17.3 feed units, 2.8 kg of digestible protein, and, for each feed unit of sainfoin grass is 162 g.

Green mass of sainfoin is characterized by high sugar content (up to 60 g / kg), vitamin C (in dry matter up to 228 mg / kg), provitamin A (carotene) (in 1 kg to 98 mg), minerals (phosphorus, calcium), and , in comparing with alfalfa and white sweet clover, lower fiber content. Due to the high content of calcium, its vegetative mass is

the best food for young animals; in flowering period, sainfoin is less coarsens than alfalfa.

As a result more balanced ratio of protein and sugar sainfoin does not cause to a timpany disease when grazing livestock in dew, in rainy weather or when fed by fresh grass, and therefore sowings of sainfoin can serve as an excellent pasture for all kinds of cattle. By taste, the culture concedes only to the white clover.

In the spring, sainfoin grows early, rather quickly, due to which in spring this crop are a source of early high protein feed.

The high fodder quality of sainfoin allows using it not only in green feed form, and also for the hay preparation, haylage, silage and vitamin grass flour. The last in terms of nutrition equates to concentrated feed: 1 kg of sainfoin flour contains 0, 75 feed units, 160-180 g digestible protein and up to 180 mg of carotene.

Sainfoin is a wonderful honey plant - from 1 hectare of crop can be collected 90-120 kg of high-quality honey. Herbage is stored for 5-6 years and it much smaller than other legumes damage by pests and diseases, provides high yields both in pure crops and in mixtures with other legumes and cereal perennial herbs, seed yields is high and stable over the years.

Culture is an effective phytomeliorant, early releases the field, serves as a good precursor for many crops, because due to powerful root galls development on its roots, it enriches soil by nitrogen (100-230 kg / ha). Thanks to ability absorb hard-soluble phosphorus and calcium compounds from deeper layers of soil sainfoin can also be grown with a small amount of mineral fertilizer.

Thus, sainfoin is one of the few crops which suitable for effective cultivation in conditions of unstable moisture. Due to high drought tolerance and winter resistance, unpretentiousness to the soil fertility and high and stable productivity over the years, sainfoin is a promising forage culture. Cultivation of the specified forage crop enables to provide livestock with high-quality and nutritious forages and acts as a powerful factor in increasing of arable land fertility.

Keywords: common sainfoin , Trans-Caucasian sainfoin, sandy sainfoin, feed value, feeding value.