

Histidine increases secretion and motility of gastrointestinal tract as well as normalizes lipoprotein metabolism.

High arginine content in Hoodia gordonii's powder contributes in ammonia detoxification, increases glycogen level in liver during starvation as well as increases insulin level in blood.

Methionine shows lipotropic effect, has an ability to eliminate the excess fat from liver cells.

To make a conclusion, it should be mentioned that aminoacids directly take part in pharmacological action formation of the powder from the stem core pulp of Hoodia gordonii that is used as source for remedies used for overweight correction.

IDENTIFICATION OF SULFUR-CONTAINING COMPOUNDS IN THE TYFON LEAF

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Tyfon (*Brassica campestris f. biennis* DC. × *B. rapa* L.) is a forage crop of the *Brassicaceae* family which is used for extending grazing season for lambs and cows. It is used in Ukraine as an additive in the diet of high-productive cows. The studies of the impact of tyfon on the animal organism showed the positive influence of this crop on the weight gain by cows. Therefore, this crop attracts much attention of the veterinary specialists due to its pharmacological properties. In order to prove positive effect of tyfon on the weight gain in domestic animals (especially in cattle), we carry out a complex study of the biologically active components of this crop.

One of the groups of interest is the sulfur-containing compounds – glucosinolates, which are typical for the cabbage family. It is well-known that these compounds can cause negative goitrogenic effect when taken in high doses along with their positive effect as cancer inhibitors, that is why the precise information on these compounds is important.

On the basis of the quality tests conducted we have identified such groups of sulfur-containing compounds in the tyfon leaf and roots as thiocyanates (pink colour on adding iron (III) nitrate), isothiocyanates (black colour with silver nitrate after enzymatic hydrolysis) and sulfur-containing glycosides (yellow-brown colour with sodium nitroprusside). Moreover, the HPLC analysis has shown the presence of dimethylsulfoxide and dimethyltrisulfide in the plant material of tyfon, which are decomposition products of the abovementioned sulfur-containing compounds.

One of the stages of our future work will be determination of quantitative content of glucosinolates in tyfon plant material with the prospective of developing new fodder and dietary additives on its basis.