

The Practical Significance of Legumes

¹Foziljonov Shukrullo ugli, ²Foziljonov Javokhirbek Fayzullo ugli

¹Andijan State University, Uzbekistan.

²Andijan branch of Tashkent state Agrarian University, Uzbekistan.

E-mail address: shukrullofoziljonov@gmail.com

Abstract: Currently, there are a number of problems in meeting the food needs of the population. Along with animal products, plants also play an important role in meeting this human need. In this regard, this issue plays a key role in solving current problems.

Keywords: Legumes, protein, amino acids, forage.

Introduction

Legumes belong to the family Fabaceae, whose grain and plant stem are rich in protein and have the ability to absorb free nitrogen from the air [Botany 2018]. These include Peas (*Cicer arietinum* L), Soybeans (*Glycine hispida* Max), Beans (*Phaseolus vulgaris*), Mung bean (*Phaseolus aureus*), and Peanuts (Peanuts). First of all, it should be noted that all of their organs are rich in protein. In particular, legumes are high in protein (31% in peas and up to 61% in moss). These proteins contain essential amino acids such as lysine, tryptophan, and valine [Biochemistry 1996].

The main part

Legumes are grown mainly as a secondary crop in our region. The soil is saturated with nitrogen. In other words, legumes absorb an average of 200 kg of free nitrogen per hectare per year. 30% of this amount goes out with the crop. This means that 140 kg of pure nitrogen nutrient is retained for the next crop. This is equivalent to planting 850 kg of nitrate (Chilean nitrate) per hectare. $2\text{NaNO}_3 \Rightarrow \text{N}_2 \cdot \text{X} \cdot 28 (\text{N}_2) = 170 (2\text{mol NaNO}_3) \cdot 140 \text{X} = 850$. 1.3-3.0 times predominates. For example, research shows that 1 kg of peas contains 4 times more lysine than so many grains of wheat.

Table 1

Biochemical composition of some legumes

Plants	Protein, oil, Carbohydrate% O'rt	Vitamins	Aminoacids and minerals	Energetik quvvati.100g power
Mosh Mung bean	25-30% Protein	B ₅ -pantoteniK B ₆ -pirodoksin B ₉ -folat PP-niasin	Lizin,leysin,arginin. K,Ca,P, Mg,Na,Se,Zn, Mn,Fe	312 kkal
No'xat Peas	20-30%protein 4-7%oil	A,B-toifali, PP, E	Leysin,lizin, fenilalanin. Fe,Zn,P,Mg	310 kkal
Loviya Beans	20-31%protein 0,7-3,6%oil 2% Carbohydrate	100gr miqdorda: 22mg B ₁ ,B ₂	Lizin,fenilalanin, valin. K,Ca, Mg, Zn,Fe	310 kkal
Yeryong'oq Peanut	35%protein 60%oil	A,E,K va D	Triptofan, gistidin,leysin makro,mikro	600 kkal
Soya Soybeans	30-52%protein 18-25%oil 20% carbohydrate	E,K,C,PP,B ₁	Lizin, metionin, treonin	450 kkal

In addition, the straw of these crops contains 8-14% protein, while the straw of cereals contains 3-4% protein [Botany 2018]. But their straw is still not used as mass feed. In one year, 135 million hectares of legumes are planted worldwide. About 90% of this amount is soybean. In the wetlands of Uzbekistan, the focus is on beans, and on dry lands, peas. [Soil ecology]. At present, they are susceptible to diseases such as Fusarium wilt, phytophthora, rot, rhizoctoniosis, stem rot, fusarium wilt, legume, false dew, ascochitosis, septorios, sercosporosis and mosaic, black spot nightshade, meadow butterfly, so on. Pests such as mosquitoes, gnats, nodular nematodes, aphids, thrips, barn nymphs, and cereals [Pests of legume crops 2015], [Entomology 1977].

Conclusion

Summarizing the results of theoretical and practical research, legumes are not only nutritious but also highly productive in agriculture. In order to increase the scope and correctness of the application in these areas, it is necessary to increase and publicize the data in the field of legume research. To make the information clearer, it is advisable to use the comparison method. In addition, entomological news and research are directly related to this area.

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