

DETERMINATION OF MORPHOBIOLOGICAL PECULIARITIES AND TOTAL PROTEIN CONTENT OF THE SOYBEAN (GLYCINE MAX) PLANT

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Abstract. On the basis of the soybean plant, the technology of protein extraction was developed, and according to the results of the analysis, the nitrogen content of sample 1 was 0.43%, and the content of sample 2 was 0.224%. In general protein quantification, however, sample 1 was shown to be 2.71% and sample 2 was shown to be 1.4%. It can be summed up that the presence of irreplaceable amino acids in the grain of a soy plant belonging to the legume family, which has its place on a global scale, determines its nutritional value. Investigations have found that these proteins can be substituted for soy plant proteins in terms of composition reflected in experiments.

Keywords. Soy plant (*Glycine hispida maxim*), protein.

Annotatsiya. Soya o'simligi asosida oqsil ajratib olish texnologiyasi ishlab chiqildi va ularnigmiqdori tahlil natijalariga ko'ra, 1-namunaviy moddaning azot miqdori 0.43 %, 2 namunaviy moddaning miqdori 0.224 % ni tashkil qildi. Umumiy oqsillar miqdorini aniqlash bo'yicha esa 1-namunaviy modda 2.71 % , 2 namunaviy modda esa 1.4 % ekanligi isbotlandi. Bundan hulos qilish mumkinki, dunyo miqyosida o'z o'rniga ega bo'lgan dukkakdoshlar oilasiga mansub soya o'simligi doni tarkibida almashinmaydigan aminokislotalar mavjudligi uning ozuqaviy ahamiyatini belgilab beradi. Tekshirishlar natijasida esa ushbu oqsillar tarkibi jihatdan soya o'simligi oqsillari bilan almashtirish mumkinligi tajribalarda o'z aksini topdi.

Kalit so'zlar. Soya o'simligi (*Glycine hispida maxim*), oqsil.

Introduction. At present, a number of cereals, which include lentils, beans, chickpeas, marjumak, wheat, barley, oats, corn plants, such as in terms which are listed in a higher place to a number of nutritional today, soybean (*glycine* highly sparse because of *maksim*) were also added, such as important plant, and no one is

a secret to it [1, 2]. From the above mentioned plants in the world into the structure of the soybean plant which is rich and micro makro no rest elmentlarga on the scale of the gross domestic product of today's world makes 276500 million tons[3,4,5 o'clock].

Mostly in the shade, food, technical, milk in the manufacture of confectionery products, canned products are widely used in the preparation. Quality food for livestock and poultry is also used in the task. Its composition is associated with this kind of shade to be used in many fields. Plants that shade in the structure of 30-52% of protein 17-27% oil, 20% carbon to the water is available. Other representatives of the family of plant protein soy dukkakdoshlar makes less difference, that is, well soluble in water, light on many high-quality content that is digested glitsin meat protein and amino acids on the composition of amino acids is close to [6].

China, Us-china, japan, korea spread in cis at. The growth period of these species from each other, dukkagi, the leaf size, seed size, shape, and will vary with the shape of the bush [10]. The arrow o'smligining shade the root of the root system, if you have well-developed root sitemasi there. Roots will penetrate up to a depth of 2 m to the side much longer. Other bacteria in the root system as representatives burchoqdoshlar tugunak simbioz live without. O'smligining from sir blatant shade of the stem, erect-growing, from 25 cm to 35 cm with the height of the facets will go up. The grass is green in color, two leaves, the earth turns out to urug'pallali. Shoxlangan begins from the bottom of the stem. Secondary side branches are rare.

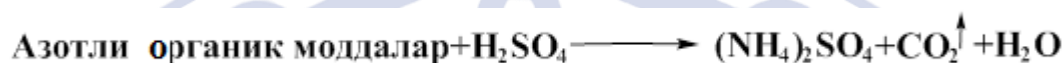
The main vegetable protein soybeans 70% additional part of globulin organized and will be able to function. A portion of the soy plant protein of albumin and other make up. They sutrukтура fermentativ and performs functions [7, 8]. One of the aspects of shade plants donidan significant fat is taken. Detected, according to data from oil plants in the world community removable 40% of the oil to bypass the shade of the plant contribute to the leads[6]. Carbohydrate content that we have to dwell in the shadow of the carbohydrates make up the main part of polisaxaridlar without starch. Oligosaxaridlar but is also available in its structure [9].

Purpose of scientific work. SOYBEAN (glycine max) PLANTS, learn skills and MORFOBIOLOGIK is to determine the amount of total protein.

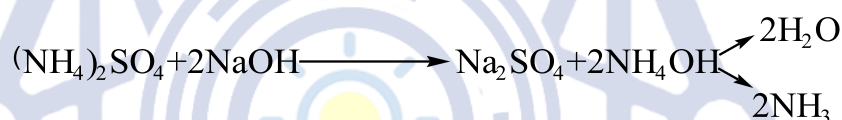
Method and style. During the survey, the selected items are grown in the jizzakh region of uzbekistan the quality of soybean (glycine max) plants. One method of determining the amount of total proteins at the method camefrom is used.

Part of the experience. The shade of shade plants get protein from cluttered to 1.5 kg, 2-4 mm maydalik is held in a sieve. Then extraction at 70 ° c in water 3 times. 1.5 l quyiltirildi all the pm water extracts . Then 1:4 ratio of dilute filtrirlandi was spirtda sink. Then dissolved in 500 ml of water and spray equipment qurutkich access to 140 C, dried at 50 c was out.

One method of determining the amount of total proteins came at method. This is being calculated by determining the amount of nitrogen on the amount of total protein. The essence of the method using sulfuric acid of the sample organic ingredients konsentrlangan gidroliz make confident the protein content of the group) from the form of ammonium sulfate salt is.



Hydrolysis ammonium sulfate, which is formed after the end of the effects of sodium alkali to convert was held.



Neutralization occurs when the resulting ammonia or ammonium hydroxide is absorbed into a solution of sulfuric acid.

The remaining acid is titrated with an alkaline solution. From the amount of ammonia calculated, the amount of nitrogen is calculated. An exact sample is pulled from the average crushed single-sex sample of the sample under study to the test tube for analysis, the error rate should not exceed 0.1%. The sample is quantitatively transferred to the Kel'dal flask. Further continuation of the experiment is carried out according to the instruction [11].

The processing of the obtained results: an analysis of the new sample of nitrogen (X) the share of the remaining amount of ammonia diluted sulfuric acid from the mass by the volume to the next titrlash in percent in relation to the mass of the sample is found by the formula.

$$X = \frac{(V_1 - V_0) * K * 0.0014}{m} * 100\%$$

V0-b orti remaining sample in the experiment with 0.1 mol/l sulfuric acid solution titrlash spent for 0.1 mol/l sodium alkali solution volume, ml .

Results. The results of the results of the research conducted shows that the soybean plant derived from the total amount of nitrogen in protein and ready in 2 different them wet and indicators will identify the amount of protein from the aspect of interest.(Table 1).

1-table

N	samples,	the amount of nitrogen (%)	Total protein amount %
1	1-Substance	0,43	2,71
2	2-Substance	0,224	1,4

Conclusion. The place can you say that in conclusion, soybean oil, vegetable protein and has developed the technology to distinguish on the basis of the results of analysis according to ularnigmiqdori, 1-standard substance, the amount of nitrogen 0.43 %, the amount of the substance 2 standard 0.224 % accounted for. In general protein quantification, however, sample 1 was shown to be 2.71% and sample 2 was shown to be 1.4%. It can be summed up that the presence of irreplaceable amino acids in the grain of a soy plant belonging to the legume family, which has its place on a global scale, determines its nutritional value. Investigations have found that these proteins can be substituted for soy plant proteins in terms of composition reflected in experiments.

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