

From cooperation with the IMF Ukraine has received a great deal of advice on what to do, but very little about how. This was largely due to the neglect of the fact that the ideas of economic policy can not be initiated and implemented in a vacuum, without the support of society. Obviously, this fact has become the determining factor in assessing IMF loan programs as ineffective.

Modern electronic payment systems in the Internet have significant prospects for development due to the availability of a number of advantages before using the usual cash settlement, have already reached a rather high level of development and are becoming more and more popular every day, including in Ukraine.

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В. Куць

SOYBEANS – STRATEGIC CROP IN UKRAINE

The article deals with the history of the origin of soy, the chemical composition of beans. A significant variety of use in the processing industry, consumption of them is described. The peculiarities of legume plants are indicated, through which the accumulation of nitrogen in the soil occurs. The indicated effectiveness of cultivation is exactly soybeans, and not other crops. The content of nutrients remaining after soybeans in the soil is considered. Number of fertilizers for germination of culture. Also, prices for fertilizers and soy are considered. The average yield is considered in a few years. Said economic efficiency and benefits for the soil when growing soybeans.

Key words: soybean, protein, nitrogen fixing bacteria, fertilizers, price

У статті розглянуто історію походження сої, хімічний склад бобів. Описано значне різноманіття використання у переробній промисловості, споживання їх. Вказано особливість бобових рослин, через яке відбувається накопичення азоту в ґрунті. Зазначена ефективність вирощування саме сої, а не

інших культур. Розглянуто вміст поживних елементів, які залишаються після сої в ґрунті. Кількість добрив для проростання культури. Також розглянуто ціни на добрива і сої. Розглянута середня врожайність за декілька років. Зазначена економічна ефективність і користь для самого ґрунту при вирощуванні сої.

Ключові слова: соя, білок, азот фіксуючі бактерії, добрива, ціна

For millenia, soy has attracted the attention of man. It is one of the oldest plants grown in Asia along with rice. The origins of the soybean plant are obscure, but many botanists believe it was first domesticated in central China as early as 7000 bce. An ancient crop, the soybean has been used in China, Japan, and Korea for thousands of years as a food and a component of medicines.

In Ukraine, soybeans appeared in the early twentieth century, and immediately triggered a lively discussion among scholars and ordinary people.

According to the State Fiscal Service of Ukraine, last year, 4.46 million tons of soya were harvested in Ukraine. Despite the loss of area under cultivation to 1.73 million hectares (13 pct less than in 2017), the production of this crop as a whole rose by 14.4 pct due to an increase in average yields up to 2.58 t/ha.

Ukraine is a leading supplier of soybeans to the European Union. In particular, almost 30 pct out of 2.76 million tons of exported soya was delivered to the EU. The European Association Donau Soja hopes that our country will retain the status of the largest soybean producer in Europe and will supply soya of conventional breeding to European processors.

The soybean is economically the most important bean in the world, providing vegetable protein for millions of people and ingredients for hundreds of chemical products. The interest in soya products is primarily due to the unique chemical composition of soy. The seed contains 17 percent oil and 63 percent meal. In general, the content of soy protein is unmatched and contains 34.9% of vegetable protein, while protein content in eggs - 12%. In addition, 90% soy protein is digested by humans. That is why this culture has become the main source of raw materials for many industries. Because soybeans contain no starch, they are a good source of protein for diabetics. Soybeans are also sprouted for use as a salad ingredient or as a vegetable and may be eaten roasted as a snack food. Young soybeans, known as edamame, are commonly steamed or boiled and eaten directly from the pod. Soy sauce, a salty brown liquid, is produced from crushed soybeans and wheat that undergo yeast fermentation in salt water for six months to a year or more; it is a ubiquitous ingredient in Asian cooking. Other fermented soy foods include tempeh, miso, and fermented bean paste.

Modern research has led to a remarkable variety of uses for the soybean. Its oil can be processed into margarine, shortening, and vegetarian cheeses. Industrially, the oil is used as an ingredient in paints, adhesives, fertilizers, sizing for cloth, linoleum backing, and fire-extinguisher fluids, among other products. Soybean meal serves as a high-protein meat substitute in many food products, including baby foods and vegetarian foods, and can be imparted with a meatlike texture for increasing the cooked yield of ground meats.

The health benefits of soybeans come from the nutrients, vitamins, and organic compounds including a significant amount of dietary fiber and a very large amount of protein. According to the USDA National Nutrient Database, soybeans contain vitamin K, riboflavin, folate, vitamin B6, thiamin, and vitamin C. As for minerals, soybeans contain significant amounts of iron, manganese, phosphorus, copper, potassium,

magnesium, zinc, selenium, and calcium. They are also a good source of organic compounds and antioxidants, which further help in boosting your health.

One of the most important agrotechnologies in the cultivation of soybeans is pre-planting seedlings with nitrogen-fixing bacteria. That is why world leaders of soy production, like the USA, Brazil and Argentina, inject most of their soybean zones. This is not just environmentally friendly technology, it is also very economical compared to using N fertilizers.

Farmers in these countries rely heavily on atmospheric nitrogen, which is captured by the fermentation plant. And there is a rational explanation.

In Ukraine, favorable climatic conditions for the cultivation of soybeans have developed, so over 20 years the crop area and gross collection of this crop have increased by 12 and 17 times, respectively. The trend towards expansion of the area and production of soybeans has survived in recent years. If in 2005 this crop was grown on an area of 427 thousand hectares, then in 2013 it expanded to 1351 thousand hectares. Accordingly, the gross tax collected in 2013 amounted to 2.77 million tons, which is 4.5 times higher than in 2005. Significant growth of sown areas and gross soybean yields indicates its extremely important role in the agrarian complex of Ukraine. Precocious and medium late varieties of soybeans, whose yields reached 25-30 centners per hectare, proved to be best. However, in Ukraine in general, yields were at 20.5 c / ha.

The potential number of inoculated soybeans of atmospheric nitrogen can reach 360-450 kg / ha. For each ton of soybeans grown, about 80 kg of N (65 kg of N gets to the seeds, which contains 40% protein and 15 kg N in the roots, stems and leaves).

For an output, for example, 2.5 T / ha, the requirement for atmospheric N will be 200 kg / ha. When using inoculants, your biological nitrogen will be insignificant. The farmer can pay from 300 to 400 UAH / ha for the most efficient inoculant on the Ukrainian market.

Soybean N-fertilizers do not exceed 60%, which means that about 340 kg of N / ha or one ton of urine (34% N) is needed to achieve the above-mentioned harvests.

In October 2018, the price of ammonium nitrate (34% N) amounted to 9,500 UAH / t and is growing every day. The price of nitrogen fertilizers should be added to the cost of fuel for fertilizer machines. Soybean price for today is 9000 UAH / T. So, cultivating this culture is a very beneficial and useful thing.

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