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**Bioecological features and technology of growing the Chia plant
(*lat. Salvia hispanica*).**

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Abstract. The article provides information about the useful properties of ornamental plants - *Salvia hispanica*, which is considered to be native to Central and South America, the technology of cultivation and reproduction in our region.

Keywords. *Salvia hispanica*, chlorophyll, antioxidants, adaptation, beneficial properties, cultivation technology

Definition

Chia or *Salvia hispanica* is an annual flowering plant reaching a height of 1-1.5 meters. This plant belongs to the family of clear-flowered plants such as mint, basil, rosemary and medicinal sage.

In ancient times, this plant was considered a source of strength and power for Indian tribes, a symbol of vitality. Indeed, this is an unusual product with amazing properties. For example, in ancient times, it was enough for warriors to eat a spoonful of chia seeds to increase their endurance for several hours of walking. It was also used by messengers who traveled very long distances in a short period of time, delivering messages from one tribe to another. In addition, chia seeds were used as money. They could be used to buy a slave, pay taxes, and in exchange for seeds, you could buy food or give them to the newlyweds for a wedding. The destruction of fields sown with Spanish sage subsequently led to the fall of the Aztec Empire. But a few centuries later, at the end of the last century, the cultivation of chia seeds began again on a large scale in Argentina, Mexico, Australia and neighboring countries. In natural conditions, chia seeds are grown by farmers in Paraguay and Guatemala, and are also exported as a product of the highest quality [1].

Useful properties.

According to research, the proportion of natural antioxidants in seeds of chia is higher than in *Vaccinium myrtillus* and *Vaccinium uliginosum*. It is appreciated because of its high fiber content (30% of its content), omega-3 fats (up to 20-25%), calcium, chlorophyll and a number of minerals. They contain about 2 times more potassium than bananas and five times more calcium than natural cow's milk. They contain three times more iron than spinach. By consuming only 100 seeds of chia, the body receives a large amount of omega-3, which is equivalent to consuming 0.8 kg of red fish. Seeds of chia have a pleasant taste and aroma [figure 1]. They can be

consumed together in various dishes, juices, salads and milk. The chip is also used for weight loss. Tea is prepared and drunk from the dried leaves of the plant, like sage.

Figure 1.



Chia seeds

Cultivation technology.

Seeds of chia have the property of maintaining germination even after 10 years, due to their easy germination, this plant is also grown at home. To do this, half a cup of seeds of chia is placed in a glass jar with non-boiled water at room temperature. Putting the container in a warm, bright place for 12 hours, the seeds are mixed 2-3 times. After that, slightly larger seeds of chia should be sprinkled into the ground on an ordinary flower bed (about 2-3 centimeters, slightly larger seeds should be sprinkled into the ground) or planted in a flower pot. Young shoots appear after 3-4 days, from the third day the plant sprouts can reach a height of about 5-6 centimeters, and after a week they can be used for food. Seeds can also be germinated in winter. To grow a mature plant, the sprouts are transplanted into the ground. It is worth noting that it is more convenient to grow plants using seedlings. When grown with seeds, the sprouted young shoots are planted in ordinary soil intended for growing seedlings in the third decade of February (Fig.1). At the same time, it is necessary to observe the distance between the sprouts, the height of the bush reaches about one and a half meters.

Since chia is a light-loving plant, open ground is chosen for planting seedlings. It is desirable that watering is not frequent, but a larger volume of water is given. Chia is resistant to organic fertilizers. But, the use of fertilizers in excess of the norm

will lead to compaction of the stems of the bushes, as well as to the fact that the plant will not bloom.

Table 1.

Growing a Chia plant using a seed product

Seed germination season	Germination dates	The time of transplanting sprouts	The time of flowering	Seed ripening and harvest time	The time required to receive the seed product
The season does not choose	1-3 days	5-7 days (March-may)	June-July	August-September	1 year

Blooms of the Chia beautifully and does not require special care — when planted in the open ground, it bears fruit in a year. The ripening and harvesting of seeds takes place at the end of August-beginning of September. It is also used for decorative purposes-to create flower beds.

Conclusion.

The Chia is a useful medicinal plant that can be grown in the conditions of our region. A decoction of the stems and leaves of the plant is effective in the treatment of several diseases. Due to the high proportion of beneficial trace elements, antioxidants, and omega-3 contained in the seed product, we recommend using it both for food and for a healthy diet, as well as for decorative purposes because of its beautiful appearance.

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