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## USE OF COMPOSITE CORN FOR FEED PRODUCTIO

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*Abstract.* Currently, the use of corn components in the production of fodder is based on an approach that includes such areas as:

- preservation of whole and crushed cobs, this involves methods such as drying, ensiling, preservation using chemicals, introduction of air aeration with reduced air temperature;

- the accumulation of crushed grain and its kernel and the formation of a mixture, from cobs to threshin.

**Key words:** corn, processing, fodder, cobs, canning.

**Introduction.** In order to preserve corn cobs, they are collected using harvesters when the humidity is 40...45%. Whole or chopped cobs are loaded into storage, compacted and sealed. The most attractive option for storing cobs is to place them in a crushed form in pits or towers. At the same time, the size of the crushed particles should be in the range of 3-4 mm, and not less than 70% and not contain whole grains. When harvesting corn grains and initial mixtures with different amounts of grains and cobs, corn is harvested with grain harvesters. The cobs are threshed when the humidity is 35-

40%, then the mixture is crushed in a crusher and the resulting mass is ensiled in a ground or tower storage.

**Research materials and methods.** When the corn cobs are in a crushed state, when harvesting the mixture of grain and cobs, part of the cobs, about 40....80% of the weight of the cob, then the raw material will be used only together with the grain.

**Research results.** Adjusting the combine's working body during harvest and removing large particles during feeding can help ensure the amount of fiber needed for canned forages. For pigs, 5-7% for pigs and 10-12% for cattle, nutrients are stored due to bacterial hydrolysis of sucrose with the formation of organic acids and sugars [1]. Studies have shown that the production effect is at the level of concentrated feeds made from dry cereals. An important condition for obtaining high-quality fodder is grinding to a constant granulometric composition. In the research, it was established that the grinding module 5...6, i.e. coarse grinding and 2, fine grinding, fodder with different degrees of grinding were placed in storage containers. After 150 days of storage, coarsely ground material was found to be of lower quality than finely ground material due to lower acid content, higher alcohol content and greater dry matter loss [2,4]. Rods were used in the amount of 4.6 kg. .6 kg and used as a complete replacement of rough or concentrated feed during the first fattening period. Recipes for feed mixtures for cattle using corn mixtures are given in the table. Such fodder mixtures are prepared in granular or loose form and contain at least 0.4 k.o. and 25-30 g of digestible proteins that can be used in a mixture with fruit juices and other feeds. Corn cobs used are 12 to 1 for fattening cattle aged 11 to 15 months, it is recommended to use mixtures in the proportions given in the table. The protein deficiency in silage and meal rations can be compensated by urea. When fattening steers, full-ration feed mixtures containing corn stalks in the amount of 1-2% of the total mass of the mixture are also used [3,4]. In fattening, sometimes corn bran is used, containing partially crushed stem cake, obtained by grinding edible corn. In addition to direct use in feed, corn cobs are also used in the production of fodder yeast with a yield of about 150 kg per ton of raw material [2,3,4].

**Table 1. Proportions of fodder mixtures for cattle, kg**

Component	content of components, %		
	silage	pulpy	bard
cob rods	4	5	6
corn silage	18	6	-
beet pulp	-	35	-
the bard	-	-	50
sugar beet	5	-	5
concentrates	1,5	1,0	1,0
salt is cooked	0,08...0,10	0,1	0,1
tricalcium phosphate	0,06...0,08	0,08...0,10	-
chalk	-	-	0,08
feed molasses	-	1,0	-

**Conclusions.** Taking into account the conducted research, it can be noted that corn stalks are widely used in fodder production. They can be used both in a mixture with other components of corn (grain, stalks and leaves), and as an independent component, for the production of combined feed for cattle, pigs and in sheep breeding. Using corn cobs, 350-380 feed units can be obtained from one hectare of corn, which significantly increases the share of roughage in the total feed balance.

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## MODELING OF THE AGRICULTURAL CROPS DEVELOPMENT USING SATELLITE IMAGERY

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**Introduction.** Land use monitoring is an important task in modern agriculture. Monitoring results are not limited to crop surveillance: they have a wide range of applications from monitoring the condition of agricultural resources, forecasting area and yield, crop assessment to planning harvesting activities and crop preservation [1, 2]. At the same time, the problem of identification of vegetative processes on large agricultural areas during growing cycles is one of the main ones [3].