

*Materials of conferences***PHYTORECLAMATION OF PREBAIKAL REGION'S GREY WOOD SOILS**

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The phytoreclamation, done by means of the introduction of new high-productive plants: *Bunias orientalis*, *Galega orientalis*, *Polygonum divaricatum*, makes a positive effect on basic indices of grey forest soil fertility and productivity in PreBaikal Territory.

A monodirectional, focused on grain production, use of tillable lands in present-day farming systems of Irkutsk Region leads to their advanced degradation. On the tillable lands agrochemical inspection results the humus rich soils areas have reduced by 131, 6 thousand ha for 15 years. For this period of time the humus poor soils areas have increased by 74, 9 thousand ha, and the average humus content soils areas – by 130 thousand ha [1].

Among soils characterized by low and unstable fertility the most common (46, 7% of all tillable lands) in Irkutsk Region are grey wood ones [2].

The state of “out-ploughness” is typical of grey wood soils. This negative phenomenon is associated with the decrease of fresh organic matter content in the soils and soil consistency deprivation. The deterioration of physical-chemical, biological and ecological properties results in their productivity lowering.

The grey wood soils guarantee getting only 8-10 centner of grain from ha.

Various forms of soil modification, among which the replantation (earthing), ruling, sanding, bituminous grouting (soil conditioning), soil chalking, etc., are recommended for the soils enrichment.

The phytomelioration (land reclamation) – is an agroecologically and economically sound method of their fertility rise.

Compared to other methods of land-clearing the use of phytomelioration is 5-20 times as cheaper.

The phytomelioration (vegetative reclamation) is carried out with the help of new and rare plants: *Bunias orientalis*, *Galega orientalis*, *Polygonum divaricatum*, possessing a super high biological productivity and extensive root system. These plants are introduced in Irkutsk Region on the initiative of the author.

A well-developed root system of these plants drains the tith-top soil, improves physical-chemical properties of soils. The roots penetrate with under-plow-layers, extract nourishments out of hardly soluble compounds and carry them into the top-soil. The plants form a super high photosynthetic potential ($PP = 3, 0 - 5, 0 \text{ m}^2/\text{ha}/\text{days}$), produce a great amount of fresh organic matter, which performs various functions: defensive, ecological, physiological and productional.

The manufacturing expenditures on phytomelioration carrying out make 7-10 thousand rubles per 1 ha.

For four years of phytomeliorants cultivating 40-60 ton/ha of dry organic matter, 600 kg/ha of nitrogen are introduced into the soil; the content of water-resistant structural aggregates increasing up to 75%.

After four years of cultivation the soils are used as forerunners for grains for two years. The grains crop yield achieves 30-35 centner/ha (with no application of chemization means), the grains baking quality grows [3].

References:

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CATTLE RAISING INNOVATION DEVELOPMENT TRENDS IN NON-BLACK EARTH REGION

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The Russian market of meat and meat food is being integrated into the world's food market, the tendencies and processes of which, in their turn, influence the home meat food market state, to an increasing degree.

In present-day conditions at the high plane of all science branches development the ultimate meat product, as a rule, is a multicomponent one. Therefore, to solve the quality problem of a wide range of products, in the basis of which there is meat crude, it is necessary to think not only of the final meat processing technologies, but also, first of all, of obtaining meat system qualitative components forming the final product. The producer-enterprise is of a great importance as well, so as its technical level, assortment, pricing policy and the reputation in the market. The meat production competitiveness factors can be integrated into four groups: economical, technological, social and ecological ones.

For meat production consumers' market assessment the population survey was held in the region

(288 persons) (Fig. 1). It was found out that 58% of the respondents up to 45% of the total expenditures

for nutrition spend on buying meat and meat products.

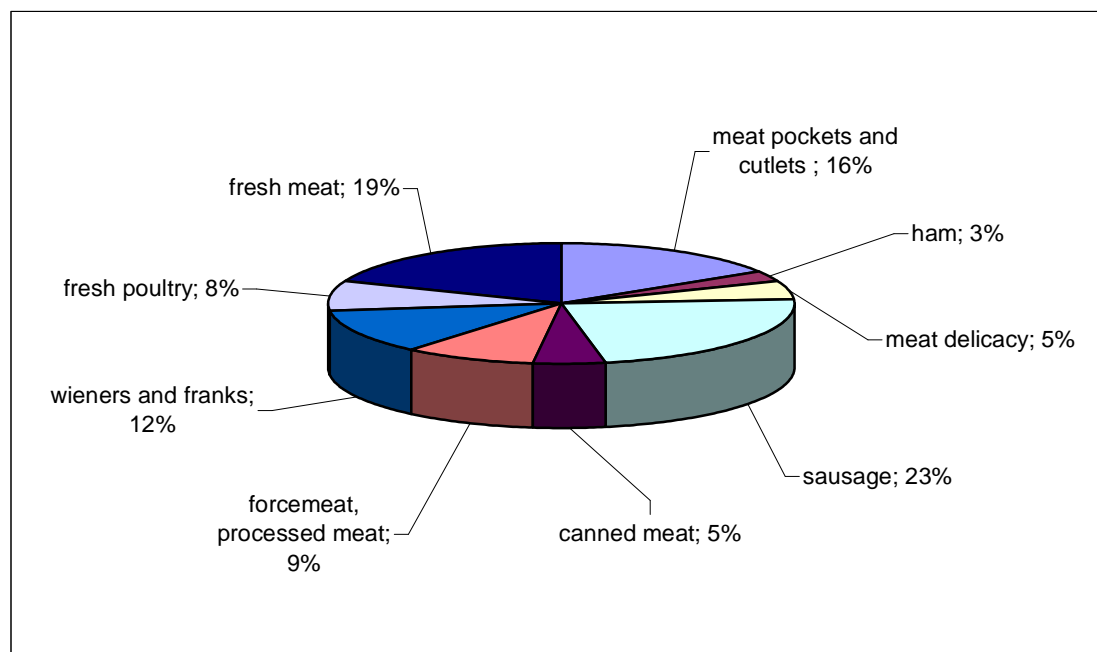


Fig. 1. Structure of consumers' preferences for meat products of respondents of Oryol Region

The respondents' answers study testified that no matter how high the prices on meat and meat products are, it remains one of the most preferable food stuffs ranking second after bread and baked goods in the chain. The study of consumers' preferences for meat products testified that the greatest percentage in the structure of consumption is taken by sausage goods – 35% totally, fresh meat ranks second – 19%, then – semi-finished products – 16%, meat delicacies, canned meat, hams are in the minimal demand.

The Oryol Region meat market competitive environment assessment testified that the leading position is occupied by Moscow commodity producers. It is conditioned both by larger volumes and scales of production and wider range of meat production in price and quality. Under the existing market environment conditions in the competitive struggle the enterprise, conducting competent policy when concluding a contract on raw material supply or increasing its own meat production values, cheapening the production as the result of nonmanufacturing costs reducing, introducing modern resource-conserving technologies, wins.

The economic and financial difficulties, which the Oryol Region APC cattle raising experiences nowadays, are redoubled by the low production level and high costs. In our opinion, such a state of production can have a poisoning effect on the economics as a whole and result in negative tendencies of supplying the population with meat products in the future. Under the circumstances for the meat animals production increase it is necessary to change the fodder base devel-

opment directions, concentrate the efforts and instruments on the fodder production expansion, its quality and ration balance improvement, the fodder payback promotion. The bioclimatic potential of the Oryol Region is favourable to the intensification of fodder production, green and forage production expansion, if it is remembered that in many economies there are large hay acreages and pastures.

The investigations testify that every kilogram of pasture herbage costs to the Oryol Region 2, 4 times, and the digestible protein – 3, 5 times, cheaper than grain production, permanent grasses herbage.

The accelerated development of meat industry requires the solution of a range of problems associated with the coordination of interbranch connections and productions. At the present time in Russia 34 kg of meat on a per caput basis is produced (Oryol Region – 71 kg), while the consumption (thanks to import) makes 55 kg on a per caput basis (Oryol Region – 79 kg).

The low animal production, high labour costs, and also high production goods, fuel and energy costs, the inflation result in the constant production cost development, return rate lowering.

In our opinion, the government's role in the creation of effective market management mechanism levers should be aimed, first of all, at the creation of favourable economic conditions for the enlargement of the output, which is important with a view to national security ensuring.

As long as the problem of meat crude production for the meat processing industry is the most im-