PARTICULAR RESULTS ON VEGETAL PRODUCTION TECHNOLOGIES IN AGRICULTURAL HOLDINGS IN TIMIS COUNTY

E. IEVA, I. MACRA, Georgeta POP

* Banat's University of Agricultural Sciences and "King Michael I of Romania " Veterinary Medicine – Faculty of Agriculture

Corresponding author email: ievauegen@yahoo.com

Abstract: Agriculture evolves in a context characterized by the trend of development and the successful application of the latest knowledge and technologies in order to solve an essential problem of the development of society, which refers to the food supply in accordance with the rhythm of growth of the population and at acceptable prices. The increasing demand for food determines the necessity for us in the country to use modern agricultural production technologies, able to properly exploit the natural potential, leading to the production of food in order to meet the ever increasing needs of both quantity and quality of of the population, as well as the creation of export availability. A modern and performing agriculture can not be done without specialists without a strong R & D sector, with no specific technologies for each crop group and for each area, permanently adapted to climate change and in line with environmental protection requirements. Mark Rosegrant, researcher at the International Research Institute for Agricultural Policies, in the study "Food safety in a world with a shortage of natural resources - the role of agricultural technologies," states that, I quote: "The reality is that one technology or agricultural practice can not provide enough food for the whole world. Instead, we must promote the use of the largest possible number of these technologies to increase the yield of agriculture. "If we also take into account the growth of the global population - which could reach over 9 billion people by the year 2050, while we find a big question mark about guaranteeing global food safety. Agricultural cooperatives are the forms of association with the highest economic potential in our country's agriculture. Thus, the development of the economic component within the activities of agricultural cooperatives is a strategic objective, which requires integration in the sphere of national agricultural policies. This has to be harmonized with the implementation of programs for the consolidation of Agricultural Marketing Associations, which must establish and maintain advantageous intra- and extra-cooperative relations (agricultural producers and cooperatives, market partners).

Keywords: Agricultural cooperatives, associations, marketing

INTRODUCTION

Agricultural systems are functional units specific to the natural and socio-economic framework, created for the production of vegetal and animal production, directed and controlled by the farmer, based on solid economic, ecological and technological fundamentals applied under different climatic and soil conditions, aiming to obtain some high, quality and economically efficient production.

MATERIAL AND METHOD

The overall objective of the technology is to ensure a high and constant crop yield per year on a land surface with a given labor and financial consumption. The productivity of a technology is given by the quantity of products obtained and by the labor force consumption at the surface unit.
Agricultural technology also includes a social, cultural and psychological component that is based on understanding, knowledge, receptivity from those who apply its methods. For example, landlessness has created real structural imbalances in agriculture, but also a social crisis. The employed population in agriculture has grown aged and less receptive to association on economically viable farms and the adoption of new technologies. The role of technology is to improve the consumption-efficiency ratio in order ultimately to achieve the highest and highest possible production at a lower cost per unit.

Technology is the study of methods and processes used in various sectors of agriculture, such as: field crop technology, horticultural technology, animal husbandry technology. Technology takes place on agricultural land through technological flow, representing the totality of methods and works in their order and succession naturally, starting from the preparation of the land for sowing until the harvesting of the products and removal of the vegetal debris.

That is why agriculture is not only theory and economics, but productive activity, which is expressed through various technologies and techniques, which pollute as little as possible the products obtained in the ecosystem.

RESULTS AND DISCUSSIONS

Since soils are the most fertile, with favorable physical, hydrophobic, chemical and biological properties, the main crops cover 50% of the cultivated areas.

We continue to present the cultivated areas and the total crops produced in the main crops.

Grain cereals - The surface cultivated with grain maize in 2014 represents 45.9% of the area cultivated with cereals for grains, and that cultivated with wheat 39.0%. Production of cereal grains rose 3.4% over the previous year due to growth yields per hectare (average yield per hectare), as follows: grain maize (+ 7.2%), barley and (+ 6.3%), wheat (+3.8%), oats (+ 1.5%).

Grain legumes - Production declined by 4.1% as a result of the drop in surface (-9.1%) compared to the previous year.

Oily plants - Production increased by 15.1% due to both cultivated area growth (+ 4.7%) and yields per hectare. Production increases were recorded in rape and soybeans (+ 61.0%), respectively (+ 35.3%), mainly due to the growth of the cultivated area (+ 48.4%), respectively (+ 17.6%). Surface cultivated with sunflower fell by 7.6%.

Sugar beet - Production increased by 31.9%, mainly due to the increase in yield per hectare with 19.1% and the area cultivated with 10.7%.

Potatoes - Production increased by 7.0% due to the increase in yield per hectare (+ 9.1%), although the cultivated area decreased (-2.0%), as compared to the previous year.

Vegetables - Production was lower by 3.9%, due to the decrease in cultivated areas by 7.7%, compared to the previous year.
CONCLUSIONS
The main conclusions from this paper bring an additional originality from the point of view of
the study of the optimization of the plant production technologies in Banat and represent a viable source of information for grain growers (wheat, barley / barley, maize), legumes for beans, oil plants, who want to obtain high and high quality produce. Several specialists from different areas have analyzed factors that drive low production, proposing remedial measures and remedies, in line with new technologies and environmental standards: plant production / technologies, pedology, agri-environment, marketing, agrarian economy and marketing.

The main factors affecting productivity: inappropriate application of scientific procedures and technologies and the recording of deficiencies in production management. The use of inefficient means of production, machinery and equipment contributes to increased cost of operations.

BIBLIOGRAPHY

BORCEAN I., DAVID GH, BORCEAN A, IMBREA F, BOTOS L. On the behaviour of some new maize hybrids in the conditions of brown luvis soils in the hill area of the Banat, Lucrări Științifice Facultatea de Agricultură, USAMVB Timișoara 34, 187-192

BOTOS L, PIRŞAN P, DAVID GH, IMBREA FL, DUDA MM, MATEI GH., 2010- Behavior of maize hybrids to create the company Limagrain climatic conditions in the Western Plain, Research Journal of Agricultural Science

CRISTA F, I RADULOV, L CRISTA, A LATO, C STROIA, N BAGHINA, I GAICA, 2013, Changing quality indicators of maize grain following mineral fertilizers application, -Current Opinion inBiotechnology,.Bratislava,Slovakia,University COMENIUS, Volumul 24,suplimentul 1 DOI:10.106/J.COPBOI.2013.05.187, IF- 8,466

GROS D, VUKASIN B, IMBREA FL, 2010 Research concerning the effect of low-frequency electromagnetic radiation on moisture and weight features in maize seeds, Research Journal of Agricultural Science 42 (4), 68-71

IMBREA F.,2014, Tehnologiile Integrate, Ed. Eurobit, Timișoara

IMBREA Fl., 2011, Cercetarea agricolă mai aproape de ferma, Agrobuletin Agir An III

IMBREA Fl., 2011. Optimizarea sistemelor curente de producție a cerealelor din Banat și Câmpia de Vest, subiecțul unui parteneriat public-privat de cercetare interdisciplinară la USAMVB Timișoara, AgrobuletinAgirAn III

IMBREA Fl, 2011 Proiectele de cercetare în domeniulagriculturii: Parteneriat public-privat in the field of agricultural sciences, Agrobuletin Agir An III

MATEI GH, GHEORGHE D, ROSCULETE ELENA, IMBREA FL, ILEANA COJOCARU, 2009. Research regarding the influence of rotation and fertilization to the yield and her quality on maize cultivated on irrigated sandy soil from South-West of Oltenia,Research Journal of Agricultural Science

PIRŞAN P., DAVID GH, IMBREA FL, 2006, Fitotehnic: cereale și leguminoase pentru boabe, Editura Eurobit, Timișoara


ȘURLEA V., S. BÂRÎNA, F. CRISTA, ISIDORA RADULOV, 2016, Research on application of fertilising resources on some cereal and oil seeds crops, Research Journal of Agricultural Science 48 (4), 164-169, ISSN 2066-1843

VIOREL ION, 2010, Fitotehnie, U.S.A.M.V. București