

## **PRODUCTION EFFICIENCY OF SELECTED CEREALS IN POLAND IN 2018-2020 (pp. 5-22)**

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**Abstract:** In Poland and in the entire European Union, over 60% of the consumption of cereal grains (in total) is allocated to feeding stuff. They are usually grains of maize, wheat and barley. Therefore, the aim of this study was to determine the production and economic results of the cultivation of winter wheat, spring barley and grain maize, as well as an attempt to assess the technical, economic and environmental efficiency of their production and the efficiency value of the grain produced in 2018-2020. Data for 2018 are actual data but data for 2019-2020 are estimated data. The analysis showed that, on average, in the research years, the cultivation of these cereals was profitable, with the highest income for maize, and the lowest – for barley. Maize was also ranked first in terms of technical and efficiency value of grain, while barley was ranked first in terms of economic and environmental performance.

**Keywords:** cereals, income from activity, production efficiency

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## **THE ACTIVITY OF THE RURAL HOUSEWIVES' CLUBS ON THE EXAMPLE OF THE MASOVIAN VOIVODESHIP (pp. 23-39)**

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**Abstract:** The article discusses the contribution of women associated in Rural Housewives Associations (KGW) of the Masovian voivodeship to improving the standard of living in the countryside. It contains general information on KGW, the results of surveys performed among KGW and case studies. KGW make a significant contribution to the social development of the countryside. They have a special merit in activities for social activation, intergenerational integration, introducing innovations in the countryside, advising women farmers on running a household, taking care of children, maintaining cultural and folklore traditions, promoting handicraft products and promoting of agritourism.

**Keywords:** standard of living, country, rural housewives' club

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**THE DEGREE OF USE OF SUPPORT INSTRUMENTS UNDER THE RDP 2014-2020  
MEASURE: DEVELOPMENT OF FARMS AND AGRICULTURAL ACTIVITY  
(pp. 40-57)**

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**Abstract:** The article analyzes the activity under the name of farm and agricultural activity development under the Rural Development Program 2014-2020. This measure covered five types of operations under which the degree of use of support instruments for farms was examined. The analysis of the use of financial resources was made on a provincial basis, taking into account the limits of resources specified by the minister of agriculture. Under the measure, operations related to bonuses for young farmers and designated directions for supporting the restructuring of farms were carried out. According to the data of the Agency for Restructuring and Modernization of Agriculture, the degree of use of the allocated funds limits was 36.9% (at the end of the first half of 2020). The indicator was higher in the case of operations related to the development of entrepreneurship – development of agricultural services (44.4%). They presented less favorably data on the operation related to bonuses for starting non-agricultural activities (11.6%). Full use of the financial instruments allocated to the measure is feasible, provided that the limits of funds specified by the Minister of Agriculture are met and that full support is secured in the national budget.

**Keywords:** development, restructuring, small farm, financial support

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**BIOACTIVE MATEBOLITES OF BUCKWHEAT (*FAGOPYRUM* MILL.) (pp. 58-66)**

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**Abstrakt:** Buckwheat is a plant that does not require special soil conditions and grows perfectly in harsh environmental conditions, showing high resistance to pests and diseases. Buckwheat (*Fagopyrum esculentum*) and buckwheat (*Fagopyrum tataricum*) are rich sources of many nutrients and bioactive compounds, such as rutin, quercetin, emodin, phagopyrin, among others. Thanks to significant amounts of these compounds, buckwheat has been classified as one of the compounds which positively affect health. Growing conditions play an important role in shaping the characteristics of buckwheat seeds.

**Keywords:** breeding, buckwheat, flavonoids, rutin, quercetin, emodin, fagopyrin

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## EDIBLE SNAILS BREEDING IN POLAND (pp. 67-85)

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**Abstract:** The presented work describes the basics of heliculture, which is a relatively new field of animal production in Europe, including Poland. It covers the production of meat for consumption, mucus for the cosmetics industry and eggs for the production of „caviar of edible snails of the genus *Helix* and *Cornu*. On an industrial scale, two subspecies of the Brown snail (*Cornu aspersum*) are the subject of commercial production. It is a North African large Brown snail (*Cornu aspersum maxima*) and a Western European small Brown snail (*Cornu aspersum aspersum*). The information and review work presents briefly the issues of the main direction of heliculture, i.e. the technology of Brown snail production. Basic issues concerning the breeding biology of snails as well as the nutritional value and technological efficiency of meat processing are also presented. The parameters of the nutritional value and meat yield were compared, as well as some biological features of both Brown snail subspecies. The veterinary regulations applicable to date in the field of heliculture were also reviewed. Relevant domestic and foreign literature was used in the work.

**Keywords:** heliculture, Brown snail, *Cornu aspersum*, production technology, meat quality

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