

## CONTENTS

### AGRONOMY

The importance of cereal grasses in agronomy <b>Averchev O. V., Vasylenko N. Ye.....</b>	5
The role of elements in biologicalization in the development of the adaptive potential of new varieties of bright barley <b>Viniukov O. O., Sknypa N. L.....</b>	10
Features of biological protection of sunflower plants in non-irrigated conditions of Southern Ukraine <b>Zelinskyi Yu. A., Domaratskyi Ye. O., Pylypenko T. V.....</b>	14
Determination of the optimal heterosis model of mid-ripe corn hybrids in the conditions of the Northern Steppe <b>Kupar Yu. Yu. .....</b>	18
Efficiency of using complex microfertilizers in foliar feeding of soybeans <b>Moldovan Zh. A., Moldovan V. H.....</b>	21
Innovative bioproduct based on soil nitrogen-fixing cyanobacterium <i>Nostoc commune</i> <b>Romanenko P. O., Romanenko K. O., Brytik O. A.....</b>	24
Grain yield of promising and new winter barley varieties depending on different sowing dates in the southern Ukraine conditions <b>Serhieiev L. A., Kohut I. M.....</b>	28
Gynoecity level in promising parthenocarpic cucumber hybrids <b>Serhiienko O. V., Radchenko L. O., Solodovnyk L. D.....</b>	32
Prospective systems for monitoring the hydrothermal condition of soil: practical application and benefits for agronomists <b>Solovei V. B., Trotsenko O. O.....</b>	36
New competitive heterotic watermelon combinations <b>Shabetia O. M., Linnik Z. P., Serhiienko M. B.....</b>	40
Productivity of strawberry varieties in protected soil in the south of Ukraine <b>Shepel A. V.....</b>	44

**PLANT PROTECTION AND QUARANTINE**

The effect of soil treatment with the biological preparation groundfix  
on the productivity of *calendula officinalis*

**Myronova Yu. O., Basta O. V..... 46**

Causes of invasion of adventitious phytophages in Ukraine  
and ways to eliminate them

**Nyamtsu Ye. F., Klechkovskyi Yu. E..... 49**

**GARDENING AND VITICULTURE**

Drought resistance of blackberry varieties (*Rubus fruticosus L.*)  
as an establishing element of the level of their adaptability

**Telepenko Yu. Yu., Tereschenko Ia. Yu..... 53**

**TECHNOLOGY OF PRODUCTION**

**AND PROCESSING OF LIVESTOCK PRODUCTS**

Lifetime milk yield of Holstein cows of 80,000 kg: reality or fiction

**Goncharenko I. V., Ivanohlu A. S..... 57**

**AQUATIC BIORESOURCES AND AQUACULTURE**

Marine aquaculture of mediterranean countries

**Bezyk K. I., Lichna A. I..... 61**

The current state of extracting aquatic bioresources in Ukraine

**Burhaz M. I., Matviienko T. I. .... 64**

Current state of fisheries development in Ukraine

**Soborova O. M., Burhaz M. I., Kudelina O. Yu. .... 69**

**VETERINARY MEDICINE**

Method of preventing postpartum hypocalcemia in Holstein cows

**Stryzhyus V. V., Chekan O. M., Zaloilo I. A..... 72**

**VETERINARY HYGIENE, SANITATION AND EXPERTISE**

Dystocia detection in simmental cattle using the k-nearest neighbor method

**Zaborski D., Stadnytska O. I., Sobek Z..... 77**