

SCI-CONF.COM.UA

PROGRESSIVE RESEARCH IN THE MODERN WORLD



**PROCEEDINGS OF VI INTERNATIONAL
SCIENTIFIC AND PRACTICAL CONFERENCE
MARCH 2-4, 2023**

**BOSTON
2023**

PROGRESSIVE RESEARCH IN THE MODERN WORLD

Proceedings of VI International Scientific and Practical Conference

Boston, USA

2-4 March 2023

Boston, USA

2023

UDC 001.1

The 6th International scientific and practical conference “Progressive research in the modern world” (March 2-4, 2023) BoScience Publisher, Boston, USA. 2023. 663 p.

ISBN 978-1-73981-125-9

The recommended citation for this publication is:

Ivanov I. Analysis of the phaunistic composition of Ukraine // Progressive research in the modern world. Proceedings of the 6th International scientific and practical conference. BoScience Publisher. Boston, USA. 2023. Pp. 21-27. URL: <https://sci-conf.com.ua/vi-mizhnarodna-naukovo-praktichna-konferentsiya-progressive-research-in-the-modern-world-2-4-03-2023-boston-ssha-arhiv/>.

Editor

Komarytskyy M.L.

Ph.D. in Economics, Associate Professor

Collection of scientific articles published is the scientific and practical publication, which contains scientific articles of students, graduate students, Candidates and Doctors of Sciences, research workers and practitioners from Europe, Ukraine and from neighbouring countries and beyond. The articles contain the study, reflecting the processes and changes in the structure of modern science. The collection of scientific articles is for students, postgraduate students, doctoral candidates, teachers, researchers, practitioners and people interested in the trends of modern science development.

e-mail: boston@sci-conf.com.ua

homepage: <https://sci-conf.com.ua>

©2023 Scientific Publishing Center “Sci-conf.com.ua” ®

©2023 BoScience Publisher ®

©2023 Authors of the articles

TABLE OF CONTENTS

AGRICULTURAL SCIENCES

1. *Hryshchenko V. O., Boyko I. I., Mandrovska S. M.* 13
PROSPECTS FOR THE DEVELOPMENT OF RENEWABLE ENERGY SOURCES IN UKRAINE
2. *Shokh S. S., Karpuk L. M., Shubenko L. A.* 19
ENVIRONMENTAL PLASTICITY OF WINTER RAPE VARIETIES IN TERMS OF YIELD
3. *Оленіч О. А.* 22
СТВОРЕННЯ НОВИХ ПЕРСПЕКТИВНИХ СОРТІВ ХРИЗАНТЕМИ В УМОВАХ ЛІСОСТЕПОВОЇ ЛІВОБЕРЕЖНОЇ ПРОВІНЦІЇ В ВОРСКЛО-СУЛЬСЬКОМУ ОКРУЗІ УКРАЇНИ

VETERINARY SCIENCES

4. *Яценко І. В.* 27
ВПЛИВ НОВІТНІХ НАУКОВИХ ЗДОБУТКІВ ХАРКІВСЬКОЇ НАУКОВОЇ ШКОЛИ СУДОВО-ВЕТЕРИНАРНИХ ЕКСПЕРТІВ НА ЕФЕКТИВНІСТЬ ПРИЗНАЧЕННЯ ТА ПРОВЕДЕННЯ СУДОВО-ВЕТЕРИНАРНОЇ ЕКСПЕРТИЗИ

BIOLOGICAL SCIENCES

5. *Алекперов Р., Гусейнова И., Мирджалаллы И.* 45
БИОМОРФОЛОГИЧЕСКИЕ ХАРАКТЕРИСТИКИ, ФИТОХИМИЧЕСКИЙ СОСТАВ И ПРЕИМУЩЕСТВА ВИДА ERHEDRA EQUISETINA BUNGE

MEDICAL SCIENCES

6. *Adarsh Kumar Bussa, Rash Ha Sheikh, Grigoryan A.* 50
EFFECTS OF E-CIGARETTES AND NICOTINE POUCHES ON HUMAN HEALTH
7. *Ivanov V. P., Zakrevska M. M.* 55
CLINICAL PROFILE OF PATIENTS WITH HYPERTENSION AND ATRIAL FIBRILLATION BY RELATIVELY LOW SERUM NTpro-BNP LEVELS
8. *Khakimova G. A., Dusmuratova Durdonaxon Mirzailxom qizi* 60
TO THE QUESTION OF CARDIOVASCULAR PATHOLOGY IN THE ASPECT OF PATHOPHYSIOLOGY
9. *Makhlynets N., Pavlyshyn M., Ozhogan Z.* 65
INFLUENCE OF ORAL HABITS ON THE DEVELOPMENT OF ACQUIRED DEFORMATIONS IN THE MAXILLOFACIAL AREA
10. *Malinovskii V. A., Kuliuda V. E.* 68
IMMUNOSUPPRESSIVE THERAPY AND HEMATOPOIETIC STEM CELL TRANSPLANTATION IN THE TREATMENT OF APLASTIC ANEMIA

УДК: 633.85."324":631.559

ENVIRONMENTAL PLASTICITY OF WINTER RAPE VARIETIES IN TERMS OF YIELD

Shokh S. S.,

Associate Professor, Candidate of Agricultural
Sciences, Associate Professor

Karpuk L. M.,

Doctor of Agricultural Sciences, Professor

Shubenko L. A.

Candidate of Agricultural Sciences, Associate Professor
Bila Tserkva National Agrarian University
m. Kyiv, Ukraine

Abstract: In modern conditions of climatic variability, the main requirement for rape varieties is the ability to form high yields in arid conditions, to tolerate difficult winter periods in different natural and climatic conditions.

Keywords: rapeseed, weather conditions, population, yield, environmental plasticity.

In recent years, weather conditions in Ukraine, and in particular at the BNAU experimental field, have been characterized by sharp changes from dry conditions to waterlogging in spring, hot periods in summer, uneven snow cover, ice crust formation, and temperature changes during winter. Winter rapeseed is a moisture-loving crop with low winter hardiness, which does not tolerate sudden changes during critical periods of growth and development. The creation of winter rape starting material using provocative backgrounds makes it possible to obtain new varieties ecologically adapted to adverse conditions [4-5].

For breeding purposes, populations of winter rape with high ecological plasticity that exhibit high yields over generations are valuable. Yield is a complex trait that is determined by a certain level of simple traits. Such as the number of seeds per pod, weight of 1000 seeds, number of pods per shoot and per plant and their

interaction [6, p.13]. The inheritance of such a complex trait as yield occurs under systemic polygenic control and has a complex inheritance of each of the simple traits. Evaluation by traits includes a comprehensive approach to determining the critical level of factors that affect the yield of winter rape [1-3].

The purpose of the research was to identify varieties with high frost resistance and comprehensive yields in drastically different environmental conditions in recent years. The study of the working collection of 52 varieties showed that in terms of the manifestation of simple traits in sharply different weather conditions, varieties of Ukrainian and German selection had higher performance than varieties of other origin. In terms of frost resistance, most of the varieties had low and medium resistance - from 4 to 6 points on a nine-point scale. The Landar, Nelson, and Cs45 varieties had high frost resistance - 7.5 to 8.1 points. The ability to compensate for frozen shoots by forming new shoots when the period favorable for growth and development occurs indicates that these samples are more plastic in winter, which will be used in further work. According to a simple trait - the number of seeds per pod, the Nelson variety and the A80, A84 populations outperformed the standard and other samples of the collection in terms of the number of seeds - 25-35 seeds per pod. The variation of the trait also depends on unfavorable conditions, and samples with medium and high levels of the trait formed under unfavorable conditions are valuable for breeding work.

REFERENCES

1. Ситнік І. Напрямки, завдання, методи селекції ріпаку в Україні/ І. Ситнік //Агроперспектива, 6. – 2007. – С. 29-30.
2. Гаврилюк М. М., Салатенко В. Н., Чехов А. В. Олійні культури в Україні: Монографія/ за ред. А. В. Чехова. – К.: Основа, 2007. – 416 с.
3. Частная селекция полевых культур/ В. В. Пыльнев, Ю. Б. Коновалов, Т. И. Хупарация и др. – М. Колосс, 2005. – 552 с.
4. Шох С.С. Адаптивний потенціал ріпаку озимого за макроознакою – врожайність. Сучасні агробіотехнології та землеустрій в Україні. Біла Церква,

2011, С. 22.

5. Шох С.С. Аналіз кореляційних зв'язків між ознаками у рослин ріпаку озимого. Агробіологія: Зб. наук. праць. Біла Церква, 2011. Вип 5 (84). С. 11 – 15.

6. Шох С.С., Шубенко Л.А. Особливості успадкування елементів продуктивності у ріпаку. Зб. мат. конф. «Problems of practical application of innovations, methodology and experience» Лісабон, Португалія С. 12-15