CONTENTS

PART I THEORETICAL FOUNDATIONS OF BREEDING

Characterization of new sunflower R lines, obtained from the hybridization of cultivated sunflower *Helianthus annuus* L. with the annual species *Helianthus bolanderi* Gray
M. Hristova-Cherbadzi, M. Christov 2

Inheritance of seed oil level in soy bean
N.F. Grigorchuk 8

Peculiarities of callusogenesis in the culture of unfertilized ovules in winter rape
M.G. Kalinova, A.I. Soroka 11

The peculiarities of winter rape plants with different ploidy levels obtained through anther culture
A.I. Soroka 16

PART II BREEDING AND SEED PRODUCTION

Quantitative traits and productivity of sesame varieties
I.V. Aksyonov 22

Change of biochemical structure of seeds of a summer rape as a result of selections on resistance to the Fusarium wilt
A.A. Artamonov, M.E. Kuznetsova 27

Adaptability of soya varieties of the Poltava selection in conditions of climate change
L.G. Beljavskaja 33

Studying Lallemantia collection at the Institute of Oilseed Crops
E.V. Vedmedeva, Ja.A. Tarasova, Z.I. Lebed 39

Seed oil content of oil flax varieties under different conditions of cultivation
I. Drozd, N. Shpek, V. Lyakh 45

Ecological trialing of sunflower hybrids by breeding institutions belonging to the system of National Academy of Agrarian Science of Ukraine
V.V. Kyrychenko, K.M. Maklyak, B.F. Varenyk, V.I. Krutko, N.M. Kutishcheva, V.M. Kaban 49

Variability of important for breeding traits in linseed
T.G. Tovstanovskaya 57

The agromethods of sunflower growing by the soil minimum tillage
I.V. Aksyonov, A.E. Minkovskiy 63

Painted lady (*Vanessa cardui* L.)
I.V. Belyavsky 68

Forming productivity of *Brassica napus annua* depending on sowing date and quantity of seeds under Ukrainian South Steppe conditions
S.V. Vakhnenko, A.I. Poliakov 73

Spots of a Lucerne and measure on their restriction
R.O. Vusatyj 78

Formation of winter rape productivity in Northern Forest-Steppe conditions, depending on the terms of planting and on fertilizing systems
L.V. Gubenko, P.S. Vishnevskiy 82

Effect of Pre-Sowing Treatment of Rape Seeds with Cryoprotectants on Concentration of Soluble Carbohydrates in Plants and Their Freezing Resistance
G.Yu. Dyakonenko, Yu.S. Lysak, A.M. Kompaniets 88

Weed species composition in sunflower fields and the problem of its forecast
V. S. Zuza 91

Formation of the elements of yield structure of spring rape depending on various mineral nutrition
A.V. Ischenko 95

The effect of methods of main soil tillage and fertilizers on assimilating area formation and dry matter accumulation in winter rape in the Predkarpattja Forest Steppe conditions
N.M. Lys 100

Efficiency of chemical protection of soya crops from weeds at different levels of mineral nutrition
V.V. Plotnicov, V.G. Gilchuk, M.B. Gumenniy, V.O. Nakonechny 107

Forming productivity of sunflower and soy-bean under effect of the complex fertilizing
A.I. Poliakov, K.Ya. Boiko, O.V. Nikitenko 112

Comparative efficiency of sunflower hybrids in the conditions of the Belarus Polesye
V.A. Radaunia, V.V. Bobovkina 119

Intensive technology of *Brassica napus* protection against the pests in West Forest – Steppe of Ukraine
E.V. Snegok *124*

The efficiency of phosphoromobilizing bacterial preparations in the technology of winter rape growing
T.I. Stepiak *128*

Influence of the methods of sowing and norm of the sowing of seeds on the clean productivity of photosynthesis of the soybean
T. P. Shepilova *135*

PART IV MECHANIZATION AND PROCESSING OF RAW OIL MATERIAL

Parameters of linking rocker-sliding press-brigucttiner
R. Bakardzhiev, V. Gritsenko *140*

The expenses in processing non-condition oil seeds to biodiesel
S.I. Svyatchenko *145*

AUTHOR INDEX *150*

Requirements to execution of Bulletin papers *151*

Sample of paper execution *153*

CONTENTS *154*