1. Record Nr. UNINA9910787853403321 **Titolo** Ecological consequences of increasing crop productivity: plant breeding and biotic diversity / / edited by Anatoly Iv. Opalko, PhD. Larissa I. Weisfeld, PhD, Sarra A. Bekuzarova, DSc, Nina A. Bome, DSc, and Gennady E. Zaikov, DSc Pubbl/distr/stampa Waretown, NJ:,: Apple Academic Press, Inc. Boca Raton, FL:,: CRC Press,, [2015] ©2015 **ISBN** 1-77463-333-7 0-429-17305-9 1-77188-012-0 Descrizione fisica 1 online resource (324 p.) Classificazione cci1icc coll13 Disciplina 333.7616 Soggetti Agricultural ecology Agricultural productivity Crop yields Plant breeding Biodiversity Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto

Front Cover; ABOUT THE EDITORS; CONTENTS; LIST OF CONTRIBUTORS; LIST OF ABBREVIATIONS; LIST OF SYMBOLS; PREFACE; INTRODUCTION; PART I: MOUNTAIN BIOTA OF CULTIVATED MEADOW PASTURE IN NORTH CAUCASUS; CHAPTER 1: NATIVE SPECIES OF CLOVER AND TIMOTHY-GRASS IN MOUNTAIN PHYTOCENOSIS: APPLICATION IN SELECTION FOR THE CREATION OF ECONOMIC VALUABLE FORMS; CHAPTER 2: INTRODUCED FORMS OF RED CLOVER (TRIFOLIUM PRATENSE L.) OF HAYFIELD-PASTURE DIRECTION OF THE USE ON NORTH CAUCASUS; CHAPTER 3: RECEIVING OF THE NEW FORMS OF RED CLOVER FOR GROWING IN NORTH OSSETIA, KABARDINOBALKARIA, AND

CHECHEN REPUBLIC

CHAPTER 4: PRODUCTIVITY OF AMARANTH OF CULTIVAR IRISTON IN THE CONDITIONS OF NORTH OSSETIA-ALANIACHAPTER 5: VARIETAL POTATOES FEATURE DURING DIFFERENT TIMES OF PLANTING IN FOOTHILL ZONE OF NORTH OSSETIA ALANIA; CHAPTER 6: MINERAL NUTRITION AND POTATOES EFFICIENCY IN CONDITIONS OF RNO-ALANIA; PART II: PLANT BREEDING IN THE WESTERN SIBERIA: AGROECOLOGICAL APPROACHES; CHAPTER 7: A STUDY OF ECOLOGICAL AND BIOLOGICAL POTENTIAL AND FORMATION OF GENE POOL OF CULTURAL PLANTS IN INSTITUTE OF BIOLOGY OF TYUMEN STATE UNIVERSITY

CHAPTER 8: BASIC PROPERTIES OF SOD-PODZOLICSOIL OF NORTH TERRITORIES OF TYUMEN REGIONCHAPTER 9: THE SUSCEPTIBILITY OF ENVIROMENTAL FACTORS ON SEED GERMINATION CHARACTERISTICS AND BIOLOGICAL RESISTANCE OF PLANTS HYBRIDS TRITICUM AESTIVUM L.; CHAPTER 10: RELATIONSHIP BETWEEN SOYBEAN VARIETIES, SPAD502 CHLOROPHYLL METER READINGS, AND RHIZOBIA INOCULATION IN WESTERN SIBERIA; CHAPTER 11: PROBLEMS OF CARYOPSIS AND STABILITY OF WINTER AND SPRING FORMS OF CEREALS TO PHYTOPATHOGENIC FUNGI OF GENUS FUSARIUM LINK; CHAPTER 12: EVALUATION OF COLLECTION OF MEDICINAL HERBS ACCORDING TO PHYTONCIDIC ACTIVITY

CHAPTER 13: REACTION OF WINTER WHEATON HYDROTHERMIC FACTORS OF WINTERING AND VEGETATION CONCERNING BIOLOGICAL STABILITY OF PLANTS IN THE CONDITIONS OF SOUTH OF TYUMEN REGION OF RUSSIAPART III: PLANT BREEDING IN THE UKRAINE: AGROECOLOGICAL APPROACHES; CHAPTER 14: THE STUDY OF THE ANATOMICAL STRUCTURE OF APPLE-TREE TISSUES AND APPLE FRUITS (MALLUS MILL.); CHAPTER 15: METHOD FOR EVALUATION OF REGENERATION POTENTIAL OF PEAR CULTIVARS AND SPECIES (PYRUS L.); CHAPTER 16: GENETIC RESOURCES OF THE GENUS CORYLUS L. IN THE NATIONAL DENDROLOGICAL PARK "SOFIYIVKA"OF NAS OF UKRAINE CHAPTER 17: SOIL MULCHING AFFECTS FRUIT QUALITY IN STRAWBERRYCHAPTER 18: THE QUALITY OF SUGAR BEET SEEDS AND THE WAYS OF ITS INCREASE; CHAPTER 19: OF COMBINING ABILITIES OF MALE STERILITY LINES AND STERILITY BINDERS OF SUGAR BEETS AS TO SUGAR CONTENT; CHAPTER 20: SUGAR BEET ROOT ROTS DURING VEGETATION PERIOD IN UKRAINE: CHAPTER 21: CYTO GENETIC AFTER-EFFECTS OF MUTAGEN SOIL CONTAMINATION WITH EMISSIONS OF BURSHTYNSKA THERMAL POWER STATION; CHAPTER 22: THE EFFICIENCY OF THE USE OF CROP PRODUCE FOR ALTERNATIVE FUEL **PRODUCTION**

PART IV: A ROLE OF CHEMICAL MUTAGENESISIN INDUCTION OF BIODIVERSITY OF AGRICULTURAL PLANTS

Sommario/riassunto

<P>With contributions from leading scientists in agricultural biology and young researchers, this book examines the ecological consequences that sometimes arise with various methods of increasing crop productivity. It also presents agroecological approaches to crop improvement and productivity from several perspectives, examines alternative energy sources, and discusses other problems related to sustainable agriculture.