CONTENTS

Physical, physiological and genetic basis for the biological production of soil-plant complexes in natural and laboratory conditions

World collection of cucumber VIR is a source of new valuable initial material for breeding
Piskunova T. M. 1

Physico-agronomical basis for management of crop production processes, amelioration and soil protection

Agronomic efficiency of iodine foliar treatment in vegetable crop rotation
Ivanova Zh. A. 10

Agricultural field heterogeneity and its relationship with soil cover
Savin I. Yu., Vernyuk Yu. I., Kucher O. D. 17

Assessment of the effect of biologics on overwintering and yield structure of soft wheat on saline soils
Stepanova E. S. 26

Physical properties of agricultural materials

Changes in photoluminescent properties of grain after grinding
Belyakov M. V., Pyatchenkov D. S. 34

Physical and natural modeling of agricultural processes

Modeling evapotranspiration of agroecosystems based on machine learning
Dobrokhotov A. V., Kozyreva L. V., Mukhina D. P. 43