

2022

vol. 32, issue 3

problems of cryobiology and cryomedicine

contents

review

Yurchuk T.O., Pavlovyh O.V., Petrushko M.P. Sperm DNA cryodamage in domestic and farm animals: detection methods and ways of DNA integrity improvement..... 171

original contributions

theoretical and experimental cryobiology

Shevchenko N.O., Kovalenko G.V., Bashtan N.O., Mozgovska A.V., Miroshnichenko T.M., Strybul T.F., Ivchenko T.V., Kuts O.V. Physical factors of beetroot seed presowing treatment affect sowing quality and crop yield.....183

Lomako V.V., Shylo O.V., Samokhina L.M., Lutsenko D.G. Pituitary-thyroid system in rats of different ages under desynchronization, whole-body cryostimulation, and cord blood injection..... 196

Shcheniavsky I.I., Kovalenko I.F., Gulevsky O.K. Cardioprotective effect of low molecular weight (below 5 kDa) fraction of cattle cord blood cryohemolysate..... 206

Avksentieva O.O., Zhmurko V.V., Chumakova V.V. Morphogenetic responses of *Triticum aestivum* L. Calus culture during long-term effect of low positive temperatures..... 214

cryomedicine, clinical and experimental transplantology

Panchenko O.A., Kabantseva A.V. Medical and psychological rehabilitation for patients with spinal degenerative joint diseases using the whole-body extreme air cryotherapy..... 226

chronicles

In memoriam: James Ephraim Lovelock 26 July 1919 – 26 July 2022..... 236

Instructions for Authors..... 241