



**PROCEEDINGS
OF
FIRST INTERNATIONAL
BIOLOGICAL,
AGRICULTURAL AND LIFE
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NOVEMBER 7-8, 2019

LVIV, UKRAINE



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(27783) PLANT TASTE AND THERAPY IN HAUSA TRADITIONAL MEDICINE.....	162
(27857) PROTECTION OF ENDANGERED PLANTS SPECIES OF TALISH FLORA (AZERBAIJAN REPUBLIC).....	163
(28021) RESPONSE OF SOME PEPPER (<i>Capsicum annuum</i> L.) VARIETIES AGAINST WILT DISEASE CAUSED BY <i>Verticillium dahliae</i> Kleb.....	164
(28186) ANALYSIS OF ANTHOCYANINS IN MAIZE GRAINS FROM THE NATIONAL GENEBANK OF AZERBAIJAN.....	165
(28205) THE INDUCTION OF POLYPLOIDS IN ' <i>Iris sari</i> SCHOTT EX BAKER' VIA IN VITRO TECHNIQUES	166
(28555) THE EFFECT OF IMAZAMOX USAGE ON PHYTOHORMONE LEVELS IN SUNFLOWER CULTIVATION (<i>Helianthus annuus</i> L.)	167
(25231) OBSERVATIONS FOR THE DETERMINATION OF GERMINATION RATE OF <i>Juniperus excelsa</i> SUBSP. POLYCARPOS (TURKESTAN JUNIPER) SEEDS	168
(27998) TRANSCRIPTIONAL ACTIVITY OF SOME GENES IMPLICATED IN REINFORCEMENT OF CELL WALL IN SUNFLOWER AGAINST INFECTION WITH ..	169
(28007) PECULIARITIES IN THE YIELD STRUCTURE OF ACCESSIONS COMMON WINTER WHEAT WITH DIFFERENT ECOLOGICAL ORIGIN	170
(28010) THE EXPERIMENTAL REINTRODUCTION OF <i>Salix lapponum</i> L (DOWNY WILLOW) – SHORT-TERM RESULTS OF THE STUDIES	171
(27237) FERMENTATION MODELING / STABILIZATION BY PHAGE RESISTANT STARTER CULTURE (REVIEW)	172
(28019) USE OF CRISPR-CAS SYSTEMS IN VIRAL DISEASES.....	173
(28166) CYTOTOXICITY OF NATURAL AND SYNTHETIC COLOURANTS USED IN TRADITIONAL MARDIN BLUE ALMOND TOFFEE	174
(28167) POTENTIAL UV PROTECTION OF WASTE FROM <i>Prunus cerasus</i> L. RESULT IN FRUIT JUICE INDUSTRY.....	175
(28210) INVESTIGATION OF CYTOTOXIC POTENTIALS OF <i>Phoenix dactylifera</i> (PALM FRUIT).....	176
(28005) BIOINFORMATIC AND MOLECULAR-GENETIC RESEARCH OF CHICKPEA HERBICIDE RESISTANCE GENES	177
(28285) INDUCED MUTATION IN BREAD WHEAT (<i>Triticum aestivum</i> L.) GENOTYPES FOR IMPROVE YIELD COMPONENT AND QUALITY PARAMETERS	178
(28441) CHARACTERIZATION OF ALKALINE AND THERMOPHILE PROTEASE ENZYME PRODUCED FROM BACILLUS SP SB-23 STRAIN ISOLATED FROM SALT LAKE TURKEY	179
(28072) ANTIVIRAL EFFECTS OF <i>Rubus idaeus</i> L. AND <i>Plantago major</i> Leaf EXTRACTS AGAINST HERPES SIMPLEX VIRUS TYPE 1 AND ADENOVIRUS 5 IN VITRO.....	180
(28089) COMPARATIVE ANALYSIS OF FATTY ACIDS COMPOSITION BETWEEN GRASS AND LUCERNE FORAGE	181
(28098) HEALTH BENEFITS OF CONJUGATED LINOLEIC ACID.....	182
(28119) GREEN TEA EFFECTS ON MITOCHONDRIAL ACTIVITY OF VIRUS- ASSOCIATED CELLS AND IN VITRO RNA AND DNA SYNTHESSES	183
(26663) ROLE OF PROCESSING ON FLAVOR DEVELOPMENT IN MEAT	184

(28098) HEALTH BENEFITS OF CONJUGATED LINOLEIC ACID

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In recent years, the bioactive compounds present in food, even though in minor amounts, have received increased attention because they may have an important nutritional role. Conjugated linoleic acid (CLA) is a generic term used to describe a group of geometric and positional isomers of linoleic acid with a conjugated double bond mainly at carbons 9 and 11 or 10 and 12. Milk fat is the richest natural source of CLA. The CLA-isomers are produced via biohydrogenation of the unsaturated fatty acids presented in animal feed into saturated by rumen bacteria and by the enzymatic activity of the $\Delta 9$ -desaturase in the mammary gland. Numerous physiological properties have been attributed to CLA including action as an antiadipogenic, antidiabetogenic, anticarcinogenic, antiatherosclerotic agent and chronic inflammatory diseases. In addition, CLA has effects on bone formation and the immune system as well as fatty acid and lipid metabolism and gene expression in numerous tissues. Because potential health benefits have been associated with dietary consumption of CLA, enhancement of CLA concentrations in meat and milk is an important objective in nutrition research.

Keywords: milk fatty acids; CLA; human health