

## Obsah

### INTRODUCTION

<b>ADAMEC, V., LIČBINSKÝ, R., KOMÁRKOVÁ, D., NAVRÁTIL, J.</b> HEALTH RISKS DUE TO PM <sub>10</sub> EXPOSITION IN SOUTH MORAVIAN REGION	8
<b>BEDNÁŘOVÁ, E., KUČERA, J., MERKLOVÁ, L.</b> EUROPEAN BEECH SPRING PHENOLOGICAL PHASE OBSERVATION IN MIXED FOREST STAND BASED ON AUTOMATIC CAMERA EQUIPMENT	9
<b>BIČÁROVÁ, S.</b> SEASONAL VARIATION OF NOCTURNAL AND DAYLIGHT GROUND LEVEL OZONE CONCENTRATIONS AT RURAL SITE STARÁ LESNÁ, SLOVAKIA	10
<b>ČABOUN, V.</b> DRAFT OF STRATEGY, ADAPTATION AND MITIGATION MEASURES FROM THE VIEWPOINT OF CLIMATE CHANGE IMPACT ON FOREST ECOSYSTEMS IN SLOVAKIA	11
<b>ČABOUN, V.</b> VEGETATION EFFECT ON LOWERING THE TEMPERATURES OF SURFACES AND THE AIR IN EXTREME SUMMER HEATS	12
<b>ČIMO, J., IGAZ, D., BÁREK, V.</b> EVALUATION OF DROUGHT PERIOD ON BASIS OF AGROCLIMATIC AND SOIL FACTORS	13
<b>ČIMO, J., ŠPÁNIK, F., HRONSKÝ, Š.</b> AGROCLIMATIC DIAGRAM OF PRODUCTION GRAPEVINE PHYTOMASS IN TOKAJ REGION	14
<b>DAŘENOVÁ, E., PAVELKA, M., ACOSTA, M., JANOUŠ, D.</b> SEASONAL COURSE OF CO <sub>2</sub> EFFLUX IN GRASSLAND AND FOREST ECOSYSTEMS IN BESKYDÝ MTS.	15
<b>DAVÍDKOVÁ, H., VYBÍRAL, S., STŘEŠTÍK, J.</b> THE IMPACT OF SOLAR/GEOMAGNETIC ACTIVITY ON THE ACUTE MYOCARDIAL INFARCTION	16
<b>DOMČEKOVÁ, D.</b> LEAF DEVELOPMENT COMPARATIVE ANALYSIS OF WOODY PLANTS COMMUNITIES ON TWO MONITORED SITES LOCATED IN SOUTHERN PART OF KREMNICKE VRCHY (MOUNTAINS) DURING THE YEAR 2007	17
<b>DUFKOVÁ, J.</b> OCCURRENCE ANOMALIES OF WIND EROSION ON HEAVY SOILS	18
<b>FIALOVÁ, J., VYSKOT, I.</b> THE UTILIZATION OF GIS APPLICATION BY THE EVALUATION OF ALL- SOCIETY FOREST FUNCTIONS ON THE EXAMPLE OF MODEL AREA	19
<b>FLEISCHER, P., BLAŠKO, R.</b> BULK AND THROUGHFALL DEPOSITION OF NITROGEN IN THE TATRA NATIONAL PARK	20
<b>FRIČ, M., ŠKVARENINA, J.</b> MICROCLIMATE INFLUENCE ON HYDRO-CHEMICAL CONDITIONS OF LYSIMETRIC WATERS IN TANAP CALAMITY AREA	21
<b>GEROVÁ, E., BAŠŤÁK, Ď., GERA, M.</b> STATISTICAL STRUCTURE INVESTIGATION OF CLIMATOLOGIC MODEL OUTPUTS	22
<b>HADAŠ, P., BLÁHOVÁ, K., MIKITA, T., LITSCHMANN, T.</b> IMPACT OF THE RELIEF ON THE FORMATION OF MOISTURE CONDITIONS IN THE DĚVÍN NATIONAL NATURE RESERVE	23
<b>HÁJKOVÁ, L., NEKOVÁŘ, J.</b> TEMPORAL AND SPATIAL VARIABILITY OF SELECTED PHENOLOGICAL PHASES OF ALDER AND HAZEL IN CZECHIA	24
<b>HORA, P.</b> THE OCCURRENCE OF FROST WITHOUT SNOW COVER IN SOUTHERN MORAVIA DURING THE PERIOD OF 1961-2008	25

<b>HORÁK, J., ŠIŠKA, B., KOVAČ, K.</b> MODEL ESTIMATES OF N <sub>2</sub> O EMISSIONS FROM 4 MAIN AGRO REGIONS (PRODUCTIVE TYPES) OF SLOVAKIA	26
<b>HORECKÁ, V., HRVOL, J.</b> LONG-TERM COURSE OF SELECTED CHARACTERISTICS OF THE AIR HUMIDITY IN THE REGIONS OF DANUBE AND EAST SLOVAKIA LOWLANDS	27
<b>HORECKÁ, V., TEKUŠOVÁ, M., ČABAJOVÁ, Z.</b> CHARACTERISTICS OF THE THERMAL COMFORT AND DISCOMFORT IN SELECTED SLOVAK REGIONS	28
<b>HRÍBIK, J., TAKÁČ, J.</b> IRRIGATION TECHNOLOGIES - MITIGATION MEASURE TOWARDS CLIMATE CHANGE IMPACTS	29
<b>HRÍBIK, M., MAJLINGOVÁ, A., ŠKVARENINA, J.</b> SNOW COVER SUPPLY IN SMALL MOUNTAIN CATCHMENT OF STUDENÝ POTOK IN ZÁPADNÉ TATRY MTS.	30
<b>HURTALOVÁ, T., MATEJKA, F., JANOUŠ, D., ROŽNOVSKÝ, J.</b> BIOCLIMATIC ASPECTS OF TRANSPORT PHENOMENA IN SPRUCE STAND – ATMOSPHERE SYSTEM	31
<b>JAKUBIS, M.</b> THE INFLUENCE OF BASIC HYDROLOGIC CHARACTERISTICS OF SMALL WATERSHEDS TO PROCESS OF MORPHOGENESIS OF WATER FLOW BEDS	32
<b>KLABZUBA, J., KOŽNAROVÁ, V.</b> NEW METHOD OF STUDY ENERGY RADIATION BALANCE OF PLANT STANDS	33
<b>KNÍŽKOVÁ, I., KUNC, P., KNÍŽEK, J., DOSTÁLOVÁ, A.</b> THE EFFECT OF COLD CONDITIONS AND NUTRITION ON THERMOREGULATORY AND GROWTH RESPONSES IN CALVES	34
<b>KOHUT, M., ROŽNOVSKÝ, J., CHUCHMA, F.</b> MOISTURE BALANCE OF AGRICULTURAL LANDSCAPE	35
<b>KOŽNAROVÁ, V., POTOP, V., TŮRKOTT, L.</b> CONTRIBUTION TO STUDY OF SOIL TEMPERATURE REGIME	36
<b>KUNC, P., KNÍŽKOVÁ, I., KNÍŽEK, J., DOSTÁLOVÁ, A.</b> THERMAL INSULATION OF YOUNG CALVES EXPOSED TO COLD ENVIRONMENT	37
<b>KYSELÝ, J., PICEK, J., BERANOVÁ, R.</b> NON-STATIONARY EXTREME VALUE MODELS AND THEIR APPLICATION IN CLIMATE CHANGE STUDIES	38
<b>LAPIN, M., DRINKA, R., KREMLER, M., TOMLAIN, J.</b> SCENARIOS OF AIR HUMIDITY AND POTENTIAL EVAPOTRANSPIRATION CHANGE FOR HURBANOVO	39
<b>LEJSKA, S.</b> RAINFALL-RUNOFF RELATIONSHIPS AT THE CATCHMENT OF PUNKVA RIVER AND THEIR CHANGES DUE TO ANTHROPOGENIC ACTIVITIES IN THE PERIOD OF 1926 – 2005	40
<b>LEŠTIANSKA, A., STŘELCOVÁ, K.</b> INFLUENCE OF THE AIR TEMPERATURE ON THE STEM CIRCUMFERENCE CHANGES OF NORWAY SPRUCE ( <i>PICEA ABIES</i> L. KARST) CLONES DURING THE ONSET PERIOD OF GROWING SEASON	41
<b>LITSCHMANN, T., HADAŠ, P.</b> DEVELOPMENT OF THERMAL AND MOISTURE CONDITIONS OF THE MIKULČICE FLOODPLAIN	42
<b>LITSCHMANN, T., ROŽNOVSKÝ, J.</b> THE EFFECT OF THE CARST RELIEF ON THE MODIFICATION OF SOME METEOROLOGICAL ELEMENTS	43
<b>LOPUŠNÁ, A., SNOVKOVÁ, Z.</b> PHENOMENON OF THE CLIMATIC CHANGE IN UNDERSTANDING OF PRESCHOOL AGE CHILDREN	44

<b>MAGOVÁ, D., ŠKVARENINA, J., ĎURKOVIČOVÁ, J.</b> CHOSEN BASIC CATIONS CHANGES AS A CONSEQUENCE OF THE WIND STORM IN NOVEMBER 2004 IN THE TATRA NATIONAL PARK	45
<b>MALÁ, G., KNÍŽEK, J., PROCHÁZKA, D.</b> THE ANALYSIS OF THERMAL COMFORT OF MILKING SHEEP	46
<b>MALENOVÁ, P.</b> GIS USE IN LAND USE EVALUATION AND DEVELOPMENT OF CLIMA IN HISTORICAL CONTEXT	47
<b>MERKLOVÁ, L., BEDNÁŘOVÁ, E.</b> RESULTS OF THE PHENOLOGICAL STUDY OF THE NORWAY SPRUCE IN THE MIXED STAND	48
<b>MIŠÍKOVÁ, N.</b> HERBACEOUS VEGETATION INFLUENCE ONTO EXTREME TEMPERATURES ON GALE DISASTER AREA IN THE TATRAS NATIONAL PARK	49
<b>NOVÁK, M., CIMICKÝ, J., HÁJKOVÁ, L.</b> RELATIONSHIPS BETWEEN SUBJECTIVE SENSATIONS OF PATIENTS WITH SELECTED PSYCHIATRIC DIAGNOSIS AND WEATHER PROGRESS – METHOD AND FIRST RESULTS	50
<b>NOVÁK, P., ROŽNOVSKÝ, J., ŠOCH, M., DVOŘÁNKOVÁ, J.</b> THE INFLUENCE OF FARM ANIMALS ON THE PROCESSES THROUGH THE COUNTRY	51
<b>NOVÁK, V., KŇAVA, K.</b> FOREST SOIL WATER CONTENT ANNUAL COURSES AS INFLUENCED BY CANOPY PROPERTIES	52
<b>NOVÁKOVÁ, M., BARANČIKOVÁ, G.</b> CLIMATE DATA APPLICATION FOR MODELLING SOIL ORGANIC CARBON STOCK IN AGRICULTURAL SOIL OF SLOVAKIA	53
<b>NOVÁKOVÁ, M., SKALSKÝ, R.</b> AGROMETEOROLOGICAL MODELLING – AN ALTERNATIVE METHOD FOR CROP GROWTH MONITORING	54
<b>OSTROŽLÍK, M.</b> ATMOSPHERIC PRECIPITATION AT SKALNATÉ PLESO AND LOMNICKÝ ŠTÍT	55
<b>PAVLEDOVÁ, H., PRIWITZER, T., KONŮPKA, M.</b> EVALUATION OF AMBIENT OZONE CONCENTRATIONS AT POLANA – HUKAVSKÝ GRUN RELATED TO SYNOPTIC SITUATIONS	56
<b>PLEIŠTIKOVÁ, I., KRIŽÁNI, I., KRIŠŠÁK, V., KONTRIŠOVÁ, O., ŠKVARENINA, J.</b> MONITORING OF TOTAL MERCURY (Hg <sub>tot</sub> ) IN FOREST ECOSYSTEM IN THE KREMNICKE VRCHY MTS.	57
<b>POKLADNÍKOVÁ, H., ROŽNOVSKÝ, J., MUŽÍKOVÁ, B.</b> CHOSEN AGROCLIMATIC CHARACTERISTICS OF THE CZECH REPUBLIC ON THE BASIS OF CLIMATOLOGICAL DATA IN 10 KM GRID	58
<b>POTOP, V., TÜRKOTT, L., KOŽNAROVÁ, V.</b> APPLICATION OF GIS TOOLS FOR SPACE MODELING TO DROUGHT I NDEX-S <sub>7</sub> IN CZECHIA	59
<b>PRIBULLOVÁ, A., CHMELÍK, M., PECHO, J.</b> CLIMATOLOGY OF ERYTHÉMAL ULTRAVIOLET RADIATION DISTRIBUTION OVER SLOVAKIA	60
<b>ROŽNOVSKÝ, J., HURŤALOVÁ, T., MATEJKA, F., JANOUŠ, D.</b> VERTIKÁLNÍ ROZLOŽENÍ TEPLŮTY VZDUCHU VE SMRKOVÉM POROSTU	61
<b>SEMERÁDOVÁ, D., TRNKA, M., DUBROVSKÝ, M., ŽALUD, Z.</b> SPATIAL ANALYSIS OF CLIMATE CHANGE IMPACTS ON WINTER WHEAT YIELDS	62
<b>SKEŘIL, R., ŠIMKOVÁ, J.</b> THE INFLUENCE OF METEOROLOGICAL CONDITIONS ON AIR-POLLUTION CONCENTRATIONS IN AGGLOMERATION BRNO AND ZONE SOUTH MORAVIA	63
<b>SNOPKOVÁ, Z., ŠKVARENINOVÁ, J.</b> ANALYSIS OF THE BEGINNING OF FLOWERING OF <i>CALTHA PALUSTRIS</i> L. IN CENTRAL SLOVAKIA	64

<b>STŘEDA, T., LITSCHMANN, T., PALÁTOVÁ, E.</b> THE SOIL MOISTURE UNDER DIFFERENT TYPES OF VEGETATION COVER IN RIVER LANDSCAPE CONDITIONS	65
<b>STŘEŠTÍK, J.</b> THE INCREASE OF AVERAGE AIR TEMPERATURES OBSERVED ON THE STATION NET IN GERMANY DURING THE LAST 17 YEARS	66
<b>ŠIMKOVÁ, J., ADAMEC, V., ROŽNOVSKÝ, J.</b> THE RELATION AMONG TRAFFIC VOLUMES, AIR POLLUTANTS AND METEOROLOGIC CONDITIONS	67
<b>ŠÍŠKA, B., TAKÁČ, J.</b> SENSITIVITY OF AGROREGIONS OF SLOVAK TERRITORY ON DROUGHT IN CONDITIONS CHANGING CLIMATE	68
<b>ŠTĚPÁNEK, P., SKALÁK, P., FARDA, A.</b> RCM ALADIN-CLIMATE/CZ SIMULATION OF 2020-2050 CLIMATE OVER THE CENTRAL EUROPE REGION	69
<b>ŠURDA, P., ANTAL, J.</b> EVALUATION OF THE EFFECT OF AGROTEXTILE ON RAINFALL-RUNOFF PROCESS AND SOIL EROSION	70
<b>ŠÚTOR, J., ŠTEKAUEROVÁ, V., NAGY, V.</b> PROGNOSIS OF SOIL ARIDITY	71
<b>TAUFAROVÁ, K., HAVRÁNKOVÁ, K., CZERNÝ, R., JANOUŠ, D.</b> ATMOSPHERIC FACTORS INFLUENCING NET ECOSYSTEM PRODUCTION ON NORWAY SPRUCE FOREST IN BESKYDY MOUNTAINS	72
<b>TÓTHOVÁ, I., ANTAL, J., JOBBÁGY, J., MALATINSKÁ, L.</b> THE INDIRECT ANALYSIS OF HETEROGENITY AREA BY MATHEMATICAL MODELLING OF SOIL MOISTURE	73
<b>TUŽINSKÝ, L., GÖMÖRYOVÁ, E.</b> INFLUENCE OF UNDERGOING CLIMATE CHANGES ON WATER BALANCE AND MICROBIAL ACTIVITY IN FOREST SOILS	74
<b>VALOUCH, L., POKORNÝ, R., TOMÁŠKOVÁ, I.</b> EFFECT OF ELEVATED CO <sub>2</sub> AIR CONCENTRATION ON WATER REGIME AND TRANSPIRATION OF NORWAY SPRUCE	75
<b>VARGOVÁ, V., KOVÁČIKOVÁ, Z.</b> VZŤAH KLIMATICKÝCH FAKTOROV K PRODUKCII TTP	76
<b>VIČANOVÁ, M., MAŠÍČEK, T., TOMAN, F., STEJSKAL, B., POKORNÁ, J.</b> RUNNING RESULTS OF WATER INFILTRATION MEASUREMENTS AT VATIN LOCALITY	77
<b>VIDA, T., ŠKVARENINA, J., HOLÉCY, J.</b> METEOROLOGICAL CONDITIONS, TREND, FREQUENCY, AND ORIGIN CAUSES OF FOREST AND LAND FIRES OF THE 1976-2006 PERIOD IN THE SLOVENSKÝ RAJ NATIONAL PARK AREA	78
<b>VLČEK, V., STŘEDA, T.</b> VARIATION OF WATER STAGE AND UNDERGROUND WATER LEVEL IN ŽIDLOCHOVICE AREA	79
<b>VYMAZALOVÁ, M.</b> HOW CAN DETAILED PHENOLOGICAL MAPS OF TOPOGRAPHICALLY COMPLEX LANDSCAPE CONTRIBUTE TO BIOCLIMATOLOGICAL RESEARCH?	80
<b>WINKLER, J.</b> INFLUENCE OF AIR IN WINTER ON WEEDS IN LONG TERM MONOCULTURE OF SPRING BARLEY	81
<b>ZAHRADNÍČEK, P.</b> THE PHENOPHASES OF GRAPEVINE DEPENDING ON METEOROLOGICAL ELEMENTS	82
<b>ZELINKA, L., ŠKVARENINA, J., ROŽNOVSKÝ, J.</b> THE INFLUENCE OF METEOROLOGICAL FACTORS ON BROWN HARE POPULATION ( <i>LEPUS EUROPAEUS</i> L.) IN THE REGION OF CENTRAL MORAVIA -HOLEŠOV	83