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DAGHESTAN BRANCH OF THE SOIL SCIENTISTS' SOCIETY BEHALF OF V.V. DOKUCHAEV AND ITS ROLE IN SOIL SCIENCE DEVELOPMENT

© 2013. Z.G. Zalibekov, M.A. Balamirzoev, E.M.-R. Mirzoev**, Z.D. Biybolatova**, P.A. Abdurashidova****

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The results of scientific-organizational activities of Daghestan branch of the Russian soil scientists' society behalf of V.V. Dokuchaev for fifty years and research perspectives on soils in Daghestan and other regions were summarized. Coordinative role of the branch office is reflected by carrying out foreground activities: formation of biological department and its reorganization in the Caspian institute of biological resources of the Daghestan scientific center RAS, formation basic subdepartment of soil science in Daghestan State University and International academic journal "Arid Ecosystems". Increase in the number of members and their active work, popularization knowledge about soils, expanding impact in state, social and private organizations have brought the Department to a new level of development. Dynamic development of the Daghestan branch of soil science society to the level of International nongovernmental organizations contributes in development of academic and educational institutions of the region and state.
Keywords: periodization, structure, large-scale mapping, monitoring, development, GIS, popularization, soil properties, priorities.

ABOUT GEOLOGICAL CONDITIONS OF FORMATION OF THE SANDY MOUNTAIN SARYKUM AND GEOCHEMICAL FEATURES OF CARBONATE BLANKETS

© 2012 г. V.U. Mazapulin, E.V. Tulisheva, M.V. Khlopkova

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Some geologo-geomorphological features of the Sarykum dune depending on the condition of congestions of eolian sands and Shura-Ozen river valley, charts of wind rose of the terrain, prevalence of rock fragments and carbonate crusts in eolian sands, petrography and geochemistry of the last are studied. Genetic conclusions of dune formation are given.
Keywords: eolian sands, sandstones, dune, barchan, carbonate crusts, pseudoconglomerates, pelitomorphic carbonate, elements- impurities, carbon and oxygen isotopes.

EFFECT OF DESERTIFICATION PROCESS IN THE INTENSITY OF MIGRATION RADIONUCLIDES IN SOILS OF THE TEREK- KUMA LOWLAND

© 2013. T.A. Asvarova, Z.G. Zalibekov, A.S. Abdulaeva

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The analysis of the results of radioecological investigations in the Terek-Kuma lowland. In this paper we consider the rate of migration of radionuclides in soils affected by desertification to varying degrees - the weak and strong. Found that, in terms of intensity of aridity and desertification is increasing migratory ability and a high degree of sorption by soils of radionuclides of uranium and thorium.
Keywords: soil, desertification, aridization, radionuclides, uranium, thorium, migration.

ON THE STRUCTURE OF THE RELIEF OF SOUTHWESTERN CASPIAN LOWLAND

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The article described the geomorphological features of the south-west of the Caspian lowland. The model of the development of large natural objects of the study area and the heterogeneous nature of the rate of change of various natural processes. In the Late Pleistocene - Holocene, there were major changes in natural sites in the region. Significantly altered river system, dramatically intensified deflationary processes, has undergone substantial restructuring of the coastline. Most of the lowland surface landforms formed during the Holocene and is characterized by young and highly dynamic changes.
Keywords: geomorphology, paleogeography, Caspian lowland, Terek, Sulak, Holocene, Pleistocene, loess.

THE ECOLOGIC AND GENETIC PARTICULARITIES OF THE SHAPING IS MOUNTAIN-VALLEY SOIL OF DAGESTAN AND THEIR USE UNDER PERENNIAL PLANTINGS

© 2013. M.A. Balamirzoev, A.M. Ajiev

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The considered ecological- genetic particularities of the shaping and spreading of ground of the mountain river valleys in high-altitude zone and their change from analogue delta plains Prikaspiyskaya lowlands.

On base complex agrosoil studies are installed high-altitude limits of the accommodation of the perennial plantings depending on solstice-exposition positions adjoining declivity and hydrothermal mode of the mode of the mountain river valleys.
Keywords: mountain river valleys, high-altitude zone, mountain river valleys, water-physical characteristic, climate, precipitation, evaporation, hydrothermal mode, perennial plantings.

FACTORS PREVENTING SOIL DEGRADATION AND RESTORING THE PRODUCTIVITY OF NATURAL PASTURES IN THE NORTH - WESTERN CASPIAN

© 2013. G.N. Hasanov*, R.Z. Usmanov* N.R.Magomedov, A.A.Aytemirov** I.R.Gamidov** As.M. Adzhiev***.**

**Pricaspiyskiy institute of biological resources of the Daghestan scietific center RAS,*
***Dagestan Scientific Research Institute of Agriculture,*
****Dagestan Agricultural University named after M.M. Dzhambulatov*

The problems of restoring the natural potential of soils and natural plant communities of the North - West Caspian Sea on the basis of regulation of grazing pressures, the introduction to the culture of tolerance to salinity drought-resistant crops, a multicomponent shrub-grassland plant communities, the formation of agricultural landscapes without machining pochvyi fallow fields.
Keywords: desertification, grasslands, soil fertility, multicomponent shrub-grassland plant communities, soil treatment, clean steam.

REACTION OF PLANTS TO STRESSES AT THE INITIAL STAGES OF ONTOGENESIS

© 2013. Z.M. Alieva, N.H. Samedova, A.G. Yusufov

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The germination of seeds and feature of growth of seedlings (*Phaseolus vulgaris* L., *Helianthus annuus* L., *Zea mays* L., *Triticum vulgare* L., *Albizzia julibrissin* Durazz., *Gleditschia triacanthos* L.) at action of chisel solutions and $CuSO_4$ was studied. Defined variation factors, stability and toxicity indexes, and also tolerance to stresses of processes of growth at early stages of ontogenesis.
Keywords: stress, ontogenesis, germination, stability, phytotoxicity, copper sulphate, chisel solutions.

ABOUT REGULARITIES OF STAGES OF DIGRESSION MANIFESTATION IN EPHEMERAL-WORMWOOD COMMUNITIES OF TERSKO-KUMSKAYA LOWLAND

©2013. P.M.-S. Muratchaeva*, A.D. Khabibov**

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The comparative analysis of phytocoenotic indicators of ephemeral-wormwood communities for 2006 and 2008 showed strengthening of degradation processes as a result of joint influence of natural and anthropogenic factors.
Keywords: community, species diversity, aboveground phytomass, number of species, projective cover, pasturable digression.

ABOUT THE SANITARY-HYGIENIC INDICES OF ATMOSPHERIC AIR AS THE BASIS OF ECOLOGICAL SAFETY AND REDUCTION IN POLLUTION OF GROUND AND WATER RESOURCES

© 2013. A.A. Gadzhiev*, Al.A. Gadzhiev**

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One of ways of the control over environmental pollution is a monitoring, in particular, monitoring for emissions in atmosphere and revealing of sources emissions.
In an article results of dynamics of emissions in atmosphere in Daghestan are shown. Number of privet cars has been grown for last 5 years. All date were got from stationary and mobile sources of pollution.
Keywords: Emissions in atmosphere, pollution of atmosphere, pollution of ground and water resources, stationary and mobile sources of pollutions.

ABOUT NEW INTERACTIVE DIGITIZED SOILS MAP OF DAGHESTAN. SCALE 1:400000

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New interactive digitized soils' map Daghestan has been published, which presents results of research and generalization of wide stock cartographic data of previous generation.
Keywords: soils, digitazed map