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А П С Т Р А К Т І



Čirić M. (1974): SOME PROBLEMS OF INVESTIGATION OF FOREST SOILS PRODUCTIVITY. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

A review of literature and main problems of forest soils productivity has been discussed in this paper.

Cestar, D. Martinović, J. Pelcer, Z. (1974): CORRELATION ANALYSIS OF THE PRODUCTIVITY OF SELVER FIR (ABIES ALBA MILL.) AND CERTAIN SOIL PROPERTIES IN THE KARST REGION OF WESTERN CROATIA. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

The authors concluded that of all the studied soil properties (percentage of humus nitrogen and clay, as well as pH, A horizon and soil depth), the productivity of Silver Fir is most influenced by soil depth, especially of the brown soil on limestone.

The grouping according to the ecological groups of low growth also proved justified.

Milojković, D. Jović, N. Jović, D. (1974): THE INFLUENCE OF SOIL ON PRODUCTIVITY OF THE COMMON OAK IN THE UPPER SREM. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

The influence of soil — luvi eutric cambisol and eutric cambisol, aluvial pararendzina luvi chernozem and lichen chernozem on the productivity of common oak (*Quercus pedunculata*) in upper Srem has been studied in this paper.

Čirić, M. Burlica, Č. Vukorep, I. Beus, V. (1974): THE INFLUENCE OF SITE FACTORS ON THE PRODUCTIVITY OF BEECH FORESTS IN BOSNIA AND HERCEGOVINA. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

Studies of dependence of productivity of beech forests site factors on distric cambisols has been carried out. Multiple regression analysis with 37 independent variables has shown that the most important for yield were soil properties indicating their nutrient status.

Burlica, Č. (1974): THE PROBLEMS OF INVESTIGATION OF MOISTURE REGIME IN FOREST SOILS. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

A review of literature and actual problems in soil physics and soil-water relationships has been done, as well as the suggestions for farther investigation in the future.

Resulović, H. Vlahinić, M. Haki, Z. (1974): SOME PARTICULARITIES OF INVESTIGATION OF SKELETON SOILS. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

The difficulties of investigation of skeleton soils have been emphasized in this paper, particularly as concerned their water physical properties. 5 methods for the measurement so called partial or active bulk density were used. The method using plastic sheet was very simple, and it is recommended for quick analyses. It was found in this investigation that skeleton with small diameter (2,0—0,2 cm) contains water, what is very important from the ecological point of view.

Mayer, B. (1974): CONTRIBUTION TO INVESTIGATIONS ON THE MOISTURE REGIME OF PSEUDOGLEY UNDER FOREST VEGETATION. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

The effect of clear felling of a one hundred-year-old forest of *Quercus petraea* Liedl on the moisture régime in sloping (terrace) pseudogleys in North-Western Croatia (Jastrebarsko) was investigated. The operation increased considerably length of the wet phase of the pseudogleys to the detriment of the moist phase, while the dry phase in a two-year period of investigations was not established. Oscillations of momentary moisture were greater in soils under forest than those on open surfaces. In the winter-spring period the soil under forest and in the open is completely saturated with water, while larger amounts are accumulated in the soil under forest cover. In the vegetation period the soil under forest becomes moist more rapidly, but it also dries up more rapidly than the one on the felling strip.

Burlica, Č. Prolić, N. Haki, Z. (1974): THE RAINFALLS IN REGION TREBINJE AND ITS INFLUENCE ON THE RADIAL INCREMENT OF *PINUS HAEPENSIS* AND *PINUS NIGRA*. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

The characteristics of rainfalls in the region Trebinje and the correlation between amount of rainfalls (period 1895—1970) for Trebinje station) and radial current increment of Aleppo and Black Pine in plantation have been studied in this paper.

Vukoper, I. (1974): UNTERSUCHUNGSPROBLEMATIK DES NAHRSTOFF-HAUSHALTES DER WALDOKOSYSTEME UND DER FORSTDÜNGUNG. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

Der Verfasser betrachtet bisherige Untersuchungsergebnisse und betont folgende Problemgruppe:

— Feststellen der Bioelementeninventur bei Ökosystemen in verschiedenen Waldtypen.

— Aufstellen der Geschwindigkeit des Kreislaufs innerhalb einzelner Waldtypen.

— Ausarbeiten von Bodenuntersuchungsmethoden für die Düngungsanwendung und Aufstellen mathematischer Modelle von Simulationen über die Bewegung einzelner Elemente in verschiedenen Waldtypen.

Dekanić, I. (1974): DIE WIRKUNG DER DÜNGUNG MIT VERSCHIEDENEN MINERALDÜNGERN AUF DIE ROHHOLZERZEUGUNG IN DER ZÖNOSE DER TRAUBENEICHE UND HEINBUCH. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

In den natürlichen Beständen von Traubeneiche und Hainbuche (*Quercus-Carpinetum croaticum* Horv.) wurde unter Anwendung mineralischer Düngung, die Stickstoffs enthalten erhöhte Holzproduktion festgestellt.

Martinović, J. (1974): ENERGY OF ACCUMULATION OF BIOELEMENTS IN THE LEAVES OF THE FOREST TREES IN ISTRA. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

The assumption that autochthonous tree species in the area of Istria — in dependence on their biological characteristics and soil conditions — possess different intensities of P, K, Ca and MG accumulation, was investigated. Investigations have demonstrated that the energy of accumulation of bioelements depends on both stated factors to a considerable extent.

Popović, B. (1974): INFLUENCE OF LIME AND PHOSPHORUS FERTILIZERS UPON ACCUMULATION OF MINERAL NITROGEN IN INCUBATION EXPERIMENTS OF FOREST SOILS. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

The short — and long-term incubation experiments were carried out with soil samples (humus and mineral soil) of iron-humus podzol and forest brown soil by pretreatment with lime and phosphorus.

An increasing of mineral nitrogen accumulation for the short time (8—10 weeks) after liming was observed, but the long — term incubation (2 years) showed a negative effect of the liming. The nitrification after liming was occurred in the brown soils.

Popović, B. (1974): INFLUENCE OF LIME AND PHOSPHORUS FERTILIZER ON SOIL AFFECTED BY ADDITION OF LABELLED ^{15}N FERTILIZER NITROGEN. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

The short-term incubation experiment was carried out with the peat soils varying in the total nitrogen content, by pretreatment with ^{15}N labelled ammonium-sulphate and calcium nitrate. After high immobilisation of added mineral nitrogen in the initial stages of incubation a very expressed »priming effect« was found in peat with low total nitrogen content. Both form of the added nitrogen proved to be an equal source of nitrogen for microorganisms.

Manuševa, L. (1974): THE ORGANIC MATTER IN SOILS UNDER FOREST VEGETATION. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

A review of literature relating to humus investigation in forest soils, as well as the discussion of main problems which have to be the subject of further investigation, have been presented in this paper.

Skorić, A. (1974): LEAF LITTER AND HUMUS AT VARIOUS SILVICULTURAL MEASURES IN FOREST OF SESSILE OAK AND HORNBEAM ON PSEUDOGLEY. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

The young oak and hornbeam stand on pseudogley, was thinned out by approx. 30 % and then fertilized in several treatments. The research work also included the investigation of the leaf fall and humus during a 5 year period.

The author presents the results concerning the quantity and chemical composition of the leaf fall, the return of the nutrients into the soil and quality of the original organic mass of leaves (the ratio of C:N and C:P), which vary in experimental treatments.

A summary was also made of the obtained data on the quantity and character of the humus in the horizons O and A at the beginning and at the end of the experimental period.

Tešić, Z. Veselinović, N. (1974): MICROBIOLOGICAL INVESTIGATIONS OF FOREST SOIL IN YUGOSLAVIA — PRESENT STATUS AND PERSPECTIVE. Simpozij o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

A review of microbiological investigations of forest soils made so far, as well as the recommendation for further investigations and improvement of methods and organisation are given in this paper.

Veselinović, N. and Marković, D. (1974): THE INFLUENCE OF SILVICULTURAL MEASURES ON GENERAL BIOGENICITY AND PEDOLOGICAL OF SOIL UNDER SPRUCE FORESTS ON THE MOUNTAIN KOPAONIK. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo 1974.

In spruce forests which take central part of the mountain Kopaonik, influence of the most suitable thinnings (high intensity and selective thinning of a lesser intensity) on the dynamic of soil microflora and pedological properties of soil, have been investigated. Derived results from two sample plots are given. The first analysis was made in 1966 and the second during 1968.

Bogdanović, M. Tešić, Ž. Todorović, M. Gigov, A. (1974): THE PEAT — BOG »SENDEROVA BARA« AT HAN KRAM ON ROMANIA MOUNTAIN AND THE PROPERTIES OF ITS PEAT. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

There are three ecological environments in this peat-bog. Forest peat-bog belongs to the transitive type, put the woody peat was approached to the lowland type. Meadow peat — bog belongs to the transitive type also, but with the grass-moss peat type. Forest-meadow peat-bog belongs to the transitive type also, with the moss-grass peat, but the surface layer moss peat is approached to the high peat type. Pollen diagrams belong to »the middle balkanic pre-mountainous type«.

Živadinović, J. (1974): DISTRIBUTION OF PODURIDAE ONYCHIURIDAE AND ISOTOMIDAE (COLLEMBOLA) IN DIFFERENT SOILS AT MAGLIĆ MOUNTAIN. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

Collembola (Poduridae, Onychiuridae and Isotomidae) habitats were investigated in 46 locality in Maglić Mountain.

Great variety in composition and number of species of Poduridae, Onychiuridae and Isotomidae was found in locality, depending on properties of soils and substratum, on plant association, and altitude. In soils with AC profile at Maglić the conditions for life of great number of species and individuals are very favourable.

Koledin, D. (1974): SECONDARY PRODUCTION OF ARTHROPODS AND OLIGOCHAETA IN THE LITTER AND THE SOIL OF THE COMMUNITY QUERCETO — CARPINETUM SERBICUM (MOUNTAIN F. GORA). Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

The production of the most important litter and soil animals like insects, spiders, millipeds and earth worms was studied in the oak hornbeam forest on the mountain F. gora. Differences have been established as to their number and biomass in various seasons, as well as the differences in their production in the soil and litter. It was found that 75 per cent of the total biomass was produced in the soil and 25 per cent in the litter.

Antić, M. Jovanović, B. Jović, N. Avdalović, V. (1974): THE PROJECT OF FOREST SOILS CLASSIFICATION IN YUGOSLAVIA. Simpozij o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

A proposal of forest soils classification in Yugoslavia is given in this paper. The basic criteria for separation of systematic units are type of humus and morphogenetic composition of profile. The highest systematic unit—the genus, is separated on the basis of watering degree, namely aeration.

Zonn, S. V. (1974): PRINCIPLES AND METHODS OF SOIL INVESTIGATION BY RESEARCH OF FOREST TYPES. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

Considering the essence of forest — soils relationships and methodological problems, the author proposes basic criteria for classification of forest types.

Manuševa, L. (1974): Fe AND Al IN ORGANIC COMPLEXES — INDICATORS OF LOWER SISTEMATIC UNITS BROWN ACID SOILS ON DIFFERENT SUBSTRATUM. Simpozijum o problemima istraživanja šumskih zemljišta, POSEBNA IZDANJA Akademije nauka i umjetnosti BiH, knjiga XXIII, Odjeljenje prirodnih i matematičkih nauka, knjiga 5., Sarajevo, 1974.

The humus content in brown acid soil on phyllite is significantly higher than on iron sandstone and hornblende. C/N ratio differs as differ also the soil acidity, humus quality, humus solubility. $C_h:C_f$ ratio is wider in brown acid soil on iron sandstone than on phyllite and hornblende.

The values of iron and aluminium organically complexed and the molar ratios Al/Fe and $\frac{Al+Fe}{fulv \cdot acid}$ indicate that brown acid soil on iron sandstone has a proper cambic (B), horizon, which in brown acid soil on hornblende and phyllite transites in spodic B horizon.