

Table of contents

Volume 862

2021

[Previous issue](#)[Next issue](#)

The VIII Congress of the Dokuchaev Soil Science Society 19-24 July 2021, Syktyvkar, Komi Republic, Russian Federation

Accepted papers received: 22 September 2021

Published online: 18 October 2021

[Open all abstracts, in this issue](#)

Preface

011001

THE FOLLOWING ARTICLE IS OPEN ACCESS

Preface

[Open abstract](#), [Preface](#) [View article](#), [Preface PDF](#), [Preface](#)

011002

THE FOLLOWING ARTICLE IS OPEN ACCESS

Peer review declaration

[Open abstract](#), [Peer review declaration](#) [View article](#), [Peer review declaration PDF](#), [Peer review declaration](#)

1 Genesis and geography of soils

012001

THE FOLLOWING ARTICLE IS OPEN ACCESS

Similarities and distinctions in the genesis of salt-affected soils in different regions of the south of Eastern Siberia

G I Chernousenko

[Open abstract](#), [Similarities and distinctions in the genesis of salt-affected soils in different regions of the south of Eastern Siberia](#) [View article](#), [Similarities and distinctions in the genesis of salt-affected soils in different regions of the south of Eastern Siberia PDF](#), [Similarities and distinctions in the genesis of salt-affected soils in different regions of the south of Eastern Siberia](#)

012002

THE FOLLOWING ARTICLE IS OPEN ACCESS

Macro- and microelements in Fe-Mn concretions of cryogenic soils

S V Deneva, E M Lapteva, A N Panukov, A B Novakovsky and O V Shakhtarova

[Open abstract](#), [Macro- and microelements in Fe-Mn concretions of cryogenic soils](#) [View article](#), [Macro- and microelements in Fe-Mn concretions of cryogenic soils PDF](#), [Macro- and microelements in Fe-Mn concretions of cryogenic soils](#)

012003

THE FOLLOWING ARTICLE IS OPEN ACCESS

Sandy soils of desert-like landscapes (tukulans) of Central Yakutia

R V Desyatkin, M V Okoneshnikova, A Z Ivanova, A R Desyatkin and N V Filippov

[Open abstract](#), [Sandy soils of desert-like landscapes \(tukulans\) of Central Yakutia View article](#), [Sandy soils of desert-like landscapes \(tukulans\) of Central Yakutia PDF](#), [Sandy soils of desert-like landscapes \(tukulans\) of Central Yakutia](#)

012004

THE FOLLOWING ARTICLE IS OPEN ACCESS

Database of agricultural soils of the Western Sayan

I G Eremina and N V Kutkina

[Open abstract](#), [Database of agricultural soils of the Western Sayan View article](#), [Database of agricultural soils of the Western Sayan PDF](#), [Database of agricultural soils of the Western Sayan](#)

012005

THE FOLLOWING ARTICLE IS OPEN ACCESS

Soils of lake depressions in the steppe biome of West Siberia as indicators of Holocene climate rhythms

D A Gavrilov, E N Smolentseva and O I Saprykin

[Open abstract](#), [Soils of lake depressions in the steppe biome of West Siberia as indicators of Holocene climate rhythms View article](#), [Soils of lake depressions in the steppe biome of West Siberia as indicators of Holocene climate rhythms PDF](#), [Soils of lake depressions in the steppe biome of West Siberia as indicators of Holocene climate rhythms](#)

012006

THE FOLLOWING ARTICLE IS OPEN ACCESS

Interpretation of Cambisols on the soil map of the Russian Federation

M I Gerasimova, D E Konyushkov and T V Ananko

[Open abstract](#), [Interpretation of Cambisols on the soil map of the Russian Federation View article](#), [Interpretation of Cambisols on the soil map of the Russian Federation PDF](#), [Interpretation of Cambisols on the soil map of the Russian Federation](#)

012007

THE FOLLOWING ARTICLE IS OPEN ACCESS

Formation of organic soil horizons during the initial pedogenesis in the taiga zone of the European Russian Northeast

I A Likhanova, E M Lapteva, E G Kuznetsova and S V Deneva

[Open abstract](#), [Formation of organic soil horizons during the initial pedogenesis in the taiga zone of the European Russian Northeast View article](#), [Formation of organic soil horizons during the initial pedogenesis in the taiga zone of the European Russian Northeast PDF](#), [Formation of organic soil horizons during the initial pedogenesis in the taiga zone of the European Russian Northeast](#)

012008

THE FOLLOWING ARTICLE IS OPEN ACCESS

Possibilities of remote sensing monitoring of soil fertility indicators of arable soils

E Yu Prudnikova, I Yu Savin and G V Vindeker

[Open abstract](#), [Possibilities of remote sensing monitoring of soil fertility indicators of arable soils View article](#), [Possibilities of remote sensing monitoring of soil fertility indicators of arable soils PDF](#), [Possibilities of remote sensing monitoring of soil fertility indicators of arable soils](#)

012009

THE FOLLOWING ARTICLE IS OPEN ACCESS

Typical features of short-profile soils in the Middle Urals

I A Samofalova

[Open abstract](#), [Typical features of short-profile soils in the Middle Urals](#) [View article](#), [Typical features of short-profile soils in the Middle Urals](#) [PDF](#), [Typical features of short-profile soils in the Middle Urals](#)

012010

THE FOLLOWING ARTICLE IS OPEN ACCESS

Comparative characteristics of the cadastral value of agrolandscapes of the Siberian Federal District (as exemplified by Irkutsk and Tomsk oblasts)

P M Sapozhnikov, N I Granina and S P Kulizhskii

[Open abstract](#), [Comparative characteristics of the cadastral value of agrolandscapes of the Siberian Federal District \(as exemplified by Irkutsk and Tomsk oblasts\)](#) [View article](#), [Comparative characteristics of the cadastral value of agrolandscapes of the Siberian Federal District \(as exemplified by Irkutsk and Tomsk oblasts\)](#) [PDF](#), [Comparative characteristics of the cadastral value of agrolandscapes of the Siberian Federal District \(as exemplified by Irkutsk and Tomsk oblasts\)](#)

012011

THE FOLLOWING ARTICLE IS OPEN ACCESS

Soil cover of the Southern Ladoga region

K E Semenova

[Open abstract](#), [Soil cover of the Southern Ladoga region](#) [View article](#), [Soil cover of the Southern Ladoga region](#) [PDF](#), [Soil cover of the Southern Ladoga region](#)

012012

THE FOLLOWING ARTICLE IS OPEN ACCESS

Structural organization and composition peculiarities of soil neoformations in some types of automorphic soils in the southeast of the Bolshezemelskaya tundra

O V Shakhtarova, S V Deneva and E M Lapteva

[Open abstract](#), [Structural organization and composition peculiarities of soil neoformations in some types of automorphic soils in the southeast of the Bolshezemelskaya tundra](#) [View article](#), [Structural organization and composition peculiarities of soil neoformations in some types of automorphic soils in the southeast of the Bolshezemelskaya tundra](#) [PDF](#), [Structural organization and composition peculiarities of soil neoformations in some types of automorphic soils in the southeast of the Bolshezemelskaya tundra](#)

012013

THE FOLLOWING ARTICLE IS OPEN ACCESS

Morphological and chemical properties of soils within geological complexes affected by sulfuric acid in forest-steppe of the Central Russian Upland (Russia)

A V Sharapova, I N Semenov, A M Karpachevsky, S A Lednev and T V Koroleva

[Open abstract](#), [Morphological and chemical properties of soils within geological complexes affected by sulfuric acid in forest-steppe of the Central Russian Upland \(Russia\)](#) [View article](#), [Morphological and chemical properties of soils within geological complexes affected by sulfuric acid in forest-steppe of the Central Russian Upland \(Russia\)](#) [PDF](#), [Morphological and chemical properties of soils within geological complexes affected by sulfuric acid in forest-steppe of the Central Russian Upland \(Russia\)](#)

012014

THE FOLLOWING ARTICLE IS OPEN ACCESS

Soils of mountain-forest landscapes of the Zeysky Nature Reserve

E A Shevchuk and E Y Sukhacheva

[Open abstract](#), [Soils of mountain-forest landscapes of the Zeysky Nature Reserve View article](#), [Soils of mountain-forest landscapes of the Zeysky Nature Reserve PDF](#), [Soils of mountain-forest landscapes of the Zeysky Nature Reserve](#)

012015

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Assessment and forecast of changes in the soil cover of anthropogenically transformed landscapes](#)

E Y Sukhacheva and B F Aparin

[Open abstract](#), [Assessment and forecast of changes in the soil cover of anthropogenically transformed landscapes View article](#), [Assessment and forecast of changes in the soil cover of anthropogenically transformed landscapes PDF](#), [Assessment and forecast of changes in the soil cover of anthropogenically transformed landscapes](#)

012016

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Analysis of the experience of improving cadastral maps by the formation of cadastral plots on the basis of the soil contours of large-scale soil maps](#)

G A Suleiman, E V Vil'chevskaya, D I Rukhovich, N V Kalinina and P V Koroleva

[Open abstract](#), [Analysis of the experience of improving cadastral maps by the formation of cadastral plots on the basis of the soil contours of large-scale soil maps View article](#), [Analysis of the experience of improving cadastral maps by the formation of cadastral plots on the basis of the soil contours of large-scale soil maps PDF](#), [Analysis of the experience of improving cadastral maps by the formation of cadastral plots on the basis of the soil contours of large-scale soil maps](#)

2 Soil chemistry

012017

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Absorption capacity of hydromorphic soils in relation to heavy metal](#)

T V Bauer, T M Minkina, D L Pinskii, S S Mandzhieva, Y A Fedorov and I V Zamulina

[Open abstract](#), [Absorption capacity of hydromorphic soils in relation to heavy metal View article](#), [Absorption capacity of hydromorphic soils in relation to heavy metal PDF](#), [Absorption capacity of hydromorphic soils in relation to heavy metal](#)

012018

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Interpretation of the results of particle-size distribution determination using various soil texture classifications](#)

O S Bezuglova, V E Boldyreva, E N Minaeva and I V Morozov

[Open abstract](#), [Interpretation of the results of particle-size distribution determination using various soil texture classifications View article](#), [Interpretation of the results of particle-size distribution determination using various soil texture classifications PDF](#), [Interpretation of the results of particle-size distribution determination using various soil texture classifications](#)

012019

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Comparative analysis of Cd fractional composition in soils under anthropogenic and artificial pollution](#)

M V Burachevskaya, S S Mandzhieva, T V Bauer, I V Zamulina, T M Minkina and M Mazarji

[Open abstract](#), [Comparative analysis of Cd fractional composition in soils under anthropogenic and artificial pollution View article](#), [Comparative analysis of Cd fractional composition in soils under anthropogenic and artificial](#)

[pollution PDF](#), [Comparative analysis of Cd fractional composition in soils under anthropogenic and artificial pollution](#)

012020

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Soil organic matter and the problems of its investigation](#)

S N Chukov, A G Zavarzina, E D Lodygin and E V Abakumov

[Open abstract](#), [Soil organic matter and the problems of its investigation](#) [View article](#), [Soil organic matter and the problems of its investigation PDF](#), [Soil organic matter and the problems of its investigation](#)

012021

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Nonspecific organic compounds in permafrost hummocky peatland](#)

D N Gabov, E V Yakovleva, I V Gruzdev and R S Vasilevich

[Open abstract](#), [Nonspecific organic compounds in permafrost hummocky peatland](#) [View article](#), [Nonspecific organic compounds in permafrost hummocky peatland PDF](#), [Nonspecific organic compounds in permafrost hummocky peatland](#)

012022

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Interaction of soil humic acids with gold ions and pathfinder elements](#)

V A Korshunova, E D Lodygin, M V Charykova and S N Chukov

[Open abstract](#), [Interaction of soil humic acids with gold ions and pathfinder elements](#) [View article](#), [Interaction of soil humic acids with gold ions and pathfinder elements PDF](#), [Interaction of soil humic acids with gold ions and pathfinder elements](#)

012023

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Humus state of buried soils of different age archaeological monuments on the territory of Ufa \(Russia, Republic of Bashkortostan\)](#)

A Ya Kungurtsev, R R Suleymanov and I G Asylbaev

[Open abstract](#), [Humus state of buried soils of different age archaeological monuments on the territory of Ufa \(Russia, Republic of Bashkortostan\)](#) [View article](#), [Humus state of buried soils of different age archaeological monuments on the territory of Ufa \(Russia, Republic of Bashkortostan\) PDF](#), [Humus state of buried soils of different age archaeological monuments on the territory of Ufa \(Russia, Republic of Bashkortostan\)](#)

012024

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Natural radionuclides in soils of the Novaya Zemlya Archipelago \(Severny Island\)](#)

E V Mingareeva, B F Aparin, N I Sanzharova and A G Ryumin

[Open abstract](#), [Natural radionuclides in soils of the Novaya Zemlya Archipelago \(Severny Island\)](#) [View article](#), [Natural radionuclides in soils of the Novaya Zemlya Archipelago \(Severny Island\) PDF](#), [Natural radionuclides in soils of the Novaya Zemlya Archipelago \(Severny Island\)](#)

012025

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Regional approach to soil pollution assessment and ecological sustainability of the town soils of Kursk region](#)

N Nevedrov and G Smitskaya

[Open abstract](#), [Regional approach to soil pollution assessment and ecological sustainability of the town soils of Kursk region](#) [View article](#), [Regional approach to soil pollution assessment and ecological sustainability of the town soils of](#)

[Kursk region PDF](#), [Regional approach to soil pollution assessment and ecological sustainability of the town soils of Kursk region](#)

012026

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Evolution of soil organic matter qualitative composition under different land-use types in the Yaroslavl oblast \(European Russia\) over longstanding period](#)

[A I Popov](#), [A V Rusakov](#) and [Yu V Simonova](#)

[Open abstract](#), [Evolution of soil organic matter qualitative composition under different land-use types in the Yaroslavl oblast \(European Russia\) over longstanding period](#) [View article](#), [Evolution of soil organic matter qualitative composition under different land-use types in the Yaroslavl oblast \(European Russia\) over longstanding period PDF](#), [Evolution of soil organic matter qualitative composition under different land-use types in the Yaroslavl oblast \(European Russia\) over longstanding period](#)

012027

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Elemental composition of groundwater from peat soils in taiga landscapes of Western Siberia](#)

[I N Semenov](#)

[Open abstract](#), [Elemental composition of groundwater from peat soils in taiga landscapes of Western Siberia](#) [View article](#), [Elemental composition of groundwater from peat soils in taiga landscapes of Western Siberia PDF](#), [Elemental composition of groundwater from peat soils in taiga landscapes of Western Siberia](#)

012028

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Ecological risk assessment of heavy metals in soils of the Trans-Urals zone of the Republic of Bashkortostan \(Russian Federation\)](#)

[I N Semenova](#), [G R Ilbulova](#), [Yu S Rafikova](#), [R F Khasanova](#), [Ya T Suyundukov](#) and [M B Suyundukova](#)

[Open abstract](#), [Ecological risk assessment of heavy metals in soils of the Trans-Urals zone of the Republic of Bashkortostan \(Russian Federation\)](#) [View article](#), [Ecological risk assessment of heavy metals in soils of the Trans-Urals zone of the Republic of Bashkortostan \(Russian Federation\) PDF](#), [Ecological risk assessment of heavy metals in soils of the Trans-Urals zone of the Republic of Bashkortostan \(Russian Federation\)](#)

012029

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Water-soluble components of soils on calcareous rocks in the Polar Urals](#)

[E V Shamrikova](#), [E V Zhangurov](#), [O S Kubik](#) and [M A Korolev](#)

[Open abstract](#), [Water-soluble components of soils on calcareous rocks in the Polar Urals](#) [View article](#), [Water-soluble components of soils on calcareous rocks in the Polar Urals PDF](#), [Water-soluble components of soils on calcareous rocks in the Polar Urals](#)

012030

THE FOLLOWING ARTICLE IS OPEN ACCESS

[The new approach to assessing the qualitative composition of soil organic matter](#)

[K Tsivka](#), [A I Popov](#), [Yu V Simonova](#), [G Kholostov](#), [E Sazanova](#) and [E P Shalunova](#)

[Open abstract](#), [The new approach to assessing the qualitative composition of soil organic matter](#) [View article](#), [The new approach to assessing the qualitative composition of soil organic matter PDF](#), [The new approach to assessing the qualitative composition of soil organic matter](#)

012031

THE FOLLOWING ARTICLE IS OPEN ACCESS

The chemical composition of snow cover in the zone of activity of enterprises of the fuel and energy complex of Vorkuta, as an indicator of the encroachment of the territory

M I Vasilevich and R S Vasilevich

[Open abstract](#), [The chemical composition of snow cover in the zone of activity of enterprises of the fuel and energy complex of Vorkuta, as an indicator of the encroachment of the territory](#) [View article](#), [The chemical composition of snow cover in the zone of activity of enterprises of the fuel and energy complex of Vorkuta, as an indicator of the encroachment of the territory](#) [PDF](#), [The chemical composition of snow cover in the zone of activity of enterprises of the fuel and energy complex of Vorkuta, as an indicator of the encroachment of the territory](#)

012032

THE FOLLOWING ARTICLE IS OPEN ACCESS

Transformation of high molecular weight organic compounds in Arctic peatlands under climate change

R S Vasilevich and E D Lodygin

[Open abstract](#), [Transformation of high molecular weight organic compounds in Arctic peatlands under climate change](#) [View article](#), [Transformation of high molecular weight organic compounds in Arctic peatlands under climate change](#) [PDF](#), [Transformation of high molecular weight organic compounds in Arctic peatlands under climate change](#)

012033

THE FOLLOWING ARTICLE IS OPEN ACCESS

Hydrocarbon status of soils in zones of active tectonic faults of Baikal rift

O V Vishnyakova, V I Ubugunova, V L Ubugunov and N B Khitrov

[Open abstract](#), [Hydrocarbon status of soils in zones of active tectonic faults of Baikal rift](#) [View article](#), [Hydrocarbon status of soils in zones of active tectonic faults of Baikal rift](#) [PDF](#), [Hydrocarbon status of soils in zones of active tectonic faults of Baikal rift](#)

012034

THE FOLLOWING ARTICLE IS OPEN ACCESS

Indicators of soil and snow mass exposed to deicing agents for improving the system of hygienic regulation and pollution control

L P Voronina, L G Doneryan and K E Ponogaybo

[Open abstract](#), [Indicators of soil and snow mass exposed to deicing agents for improving the system of hygienic regulation and pollution control](#) [View article](#), [Indicators of soil and snow mass exposed to deicing agents for improving the system of hygienic regulation and pollution control](#) [PDF](#), [Indicators of soil and snow mass exposed to deicing agents for improving the system of hygienic regulation and pollution control](#)

012035

THE FOLLOWING ARTICLE IS OPEN ACCESS

Changes in the content of polycyclic aromatic hydrocarbons in tundra peatlands with increasing natural temperatures

E Yakovleva and D Gabov

[Open abstract](#), [Changes in the content of polycyclic aromatic hydrocarbons in tundra peatlands with increasing natural temperatures](#) [View article](#), [Changes in the content of polycyclic aromatic hydrocarbons in tundra peatlands with increasing natural temperatures](#) [PDF](#), [Changes in the content of polycyclic aromatic hydrocarbons in tundra peatlands with increasing natural temperatures](#)

3 Soil physics

012036

THE FOLLOWING ARTICLE IS OPEN ACCESS

Physical properties as a key factor in the soil functioning in Chernevaya Taiga (Western Siberia)

E Abakumov, S Loyko, G Istigechev and A Lapidus

[Open abstract](#), [Physical properties as a key factor in the soil functioning in Chernevaya Taiga \(Western Siberia\)](#) [View article](#), [Physical properties as a key factor in the soil functioning in Chernevaya Taiga \(Western Siberia\)](#) [PDF](#), [Physical properties as a key factor in the soil functioning in Chernevaya Taiga \(Western Siberia\)](#)

012037

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Effects of freezing-thawing cycles on porosity and geometric configuration of an artificial soils in laboratory modeling](#)

A I Abramyan, Z S Ezhelev, A B Umarova, M M Suslenkova, K A Romanenko and A E Ivanova

[Open abstract](#), [Effects of freezing-thawing cycles on porosity and geometric configuration of an artificial soils in laboratory modeling](#) [View article](#), [Effects of freezing-thawing cycles on porosity and geometric configuration of an artificial soils in laboratory modeling](#) [PDF](#), [Effects of freezing-thawing cycles on porosity and geometric configuration of an artificial soils in laboratory modeling](#)

012038

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Changes in the acidity and chemical composition of different fractions of pressed soil solutions from Chernozem depending on the value of their capillary-sorption potential](#)

V S Anisimov, A I Sanzharov, Yu N Korneev, L N Anisimova, R A Frigidov, A V Sarukhanov and D V Dikarev
[Open abstract](#), [Changes in the acidity and chemical composition of different fractions of pressed soil solutions from Chernozem depending on the value of their capillary-sorption potential](#) [View article](#), [Changes in the acidity and chemical composition of different fractions of pressed soil solutions from Chernozem depending on the value of their capillary-sorption potential](#) [PDF](#), [Changes in the acidity and chemical composition of different fractions of pressed soil solutions from Chernozem depending on the value of their capillary-sorption potential](#)

012039

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Soil temperature field and dynamics of freezing-thawing processes in the south of the Vitim Plateau \(Transbaikal region\)](#)

N B Badmaev, A B Gyninova and Yu B Tsybenov

[Open abstract](#), [Soil temperature field and dynamics of freezing-thawing processes in the south of the Vitim Plateau \(Transbaikal region\)](#) [View article](#), [Soil temperature field and dynamics of freezing-thawing processes in the south of the Vitim Plateau \(Transbaikal region\)](#) [PDF](#), [Soil temperature field and dynamics of freezing-thawing processes in the south of the Vitim Plateau \(Transbaikal region\)](#)

012040

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Urban road dust properties and its effect on the model soil's wettability](#)

G S Bykova, A B Umarova, P Guo, E A Klepikova and Ju A Zavgorodnyaya

[Open abstract](#), [Urban road dust properties and its effect on the model soil's wettability](#) [View article](#), [Urban road dust properties and its effect on the model soil's wettability](#) [PDF](#), [Urban road dust properties and its effect on the model soil's wettability](#)

012041

THE FOLLOWING ARTICLE IS OPEN ACCESS

[The rheological properties of undisturbed samples of Typical Chernozem and Vertic Solonetz](#)

D D Khaidapova, N B Khitrov and V V Klyueva

[Open abstract](#), [The rheological properties of undisturbed samples of Typical Chernozem and Vertic Solonetz](#) [View article](#), [The rheological properties of undisturbed samples of Typical Chernozem and Vertic Solonetz](#) [PDF](#), [The rheological properties of undisturbed samples of Typical Chernozem and Vertic Solonetz](#)

012042

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Simulating water transport in porous media of urban soil](#)

A A Kokoreva, A V Dembovetskiy, Z S Ezhelev, A G Bolotov, V M Stepanenko, K V Shishkin and I A Abramyan
[Open abstract](#), [Simulating water transport in porous media of urban soil](#) [View article](#), [Simulating water transport in porous media of urban soil PDF](#), [Simulating water transport in porous media of urban soil](#)

012043

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Information standards of contemporary soil evolution in the south of Western Siberia](#)

I V Mikheeva

[Open abstract](#), [Information standards of contemporary soil evolution in the south of Western Siberia](#) [View article](#), [Information standards of contemporary soil evolution in the south of Western Siberia PDF](#), [Information standards of contemporary soil evolution in the south of Western Siberia](#)

012044

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Dynamics of soil moisture regime and alases meadow phytocenoses productivity in Central Yakutia](#)

M Ch Nikolaeva and A R Desyatkin

[Open abstract](#), [Dynamics of soil moisture regime and alases meadow phytocenoses productivity in Central Yakutia](#) [View article](#), [Dynamics of soil moisture regime and alases meadow phytocenoses productivity in Central Yakutia PDF](#), [Dynamics of soil moisture regime and alases meadow phytocenoses productivity in Central Yakutia](#)

012045

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Thermal regime of Cryosols and underlying permafrost in North Yakutia in the context of global climate change](#)

V E Ostroumov, D G Fedorov-Davydov, A L Kholodov, V A Sorokovikov, G N Kraev, A V Lupachev, A A Veremeeva, S P Davydov, A I Davydova, I I Eremin *et al*

[Open abstract](#), [Thermal regime of Cryosols and underlying permafrost in North Yakutia in the context of global climate change](#) [View article](#), [Thermal regime of Cryosols and underlying permafrost in North Yakutia in the context of global climate change PDF](#), [Thermal regime of Cryosols and underlying permafrost in North Yakutia in the context of global climate change](#)

012046

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Capillary rise in polydisperse porous media and its modelling](#)

A V Smagin and N B Sadovnikova

[Open abstract](#), [Capillary rise in polydisperse porous media and its modelling](#) [View article](#), [Capillary rise in polydisperse porous media and its modelling PDF](#), [Capillary rise in polydisperse porous media and its modelling](#)

012047

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Structure of the soil pore space in the seedling bed before the seedling stage: studies using the microtomography method](#)

A V Suzdaleva, N V Verkhovtseva, E V Shein, A V Dembovetsky and K N Abrosimov

[Open abstract](#), [Structure of the soil pore space in the seedling bed before the seedling stage: studies using the microtomography method](#) [View article](#), [Structure of the soil pore space in the seedling bed before the seedling stage: studies using the microtomography method PDF](#), [Structure of the soil pore space in the seedling bed before the seedling stage: studies using the microtomography method](#)

012048

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Artificial soils for urban greening](#)

A B Umarova, T A Arkhangelskaya, M M Suslenkova and T V Ivanova

[Open abstract](#), [Artificial soils for urban greening](#) [View article](#), [Artificial soils for urban greening PDF](#), [Artificial soils for urban greening](#)

4 Soil biology

012049

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Soil biota of a pine stand in the boreal zone of Eastern Fennoscandia](#)

O N Bakhmet, M V Medvedeva, A K Saraeva, E V Moshkina and A V Mamai

[Open abstract](#), [Soil biota of a pine stand in the boreal zone of Eastern Fennoscandia](#) [View article](#), [Soil biota of a pine stand in the boreal zone of Eastern Fennoscandia PDF](#), [Soil biota of a pine stand in the boreal zone of Eastern Fennoscandia](#)

012050

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Effect of cadmium and zinc in soil on the tissue-organ level of spring barley](#)

N Chernikova, A Fedorenko, V Beschetnikov, V Rajput, T Minkina, S Mandzhieva, G Fedorenko and V Chaplygin

[Open abstract](#), [Effect of cadmium and zinc in soil on the tissue-organ level of spring barley](#) [View article](#), [Effect of cadmium and zinc in soil on the tissue-organ level of spring barley PDF](#), [Effect of cadmium and zinc in soil on the tissue-organ level of spring barley](#)

012051

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Lumbricidae distribution in the forest-steppe soils \(Central Chernozem region, Russia\)](#)

T A Deviatova, L A Alaeva and E A Negrobova

[Open abstract](#), [Lumbricidae distribution in the forest-steppe soils \(Central Chernozem region, Russia\)](#) [View article](#), [Lumbricidae distribution in the forest-steppe soils \(Central Chernozem region, Russia\) PDF](#), [Lumbricidae distribution in the forest-steppe soils \(Central Chernozem region, Russia\)](#)

012052

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Biomass of microbial communities in catenas of virgin and arable chernozems and gray forest soils](#)

K S Dushchanova, T E Khomutova, P A Ukrainski, F N Lisetski and A V Borisov

[Open abstract](#), [Biomass of microbial communities in catenas of virgin and arable chernozems and gray forest soils](#) [View article](#), [Biomass of microbial communities in catenas of virgin and arable chernozems and gray forest soils PDF](#), [Biomass of microbial communities in catenas of virgin and arable chernozems and gray forest soils](#)

012053

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Interaction of different pigmented micromycetes with humic substances and stability of soil biomes: spectral characterization](#)

E V Fedoseeva, D A Khundzhua, S V Patsaeva, A A Stepanov, O S Yakimenko and V A Terekhova

[Open abstract](#), [Interaction of different pigmented micromycetes with humic substances and stability of soil biomes: spectral characterization](#) [View article](#), [Interaction of different pigmented micromycetes with humic substances and](#)

stability of soil biomes: spectral characterization PDF, Interaction of different pigmented micromycetes with humic substances and stability of soil biomes: spectral characterization

012054

THE FOLLOWING ARTICLE IS OPEN ACCESS

Yeast complexes of urbanozems of some southern cities of Russia (Krasnodar, Maykop, Simferopol, Sochi)

A M Glushakova, A V Kachalkin, A B Umarova, A E Ivanova and I A Maksimova

[Open abstract](#), [Yeast complexes of urbanozems of some southern cities of Russia \(Krasnodar, Maykop, Simferopol, Sochi\) View article](#), [Yeast complexes of urbanozems of some southern cities of Russia \(Krasnodar, Maykop, Simferopol, Sochi\) PDF](#), [Yeast complexes of urbanozems of some southern cities of Russia \(Krasnodar, Maykop, Simferopol, Sochi\)](#)

012055

THE FOLLOWING ARTICLE IS OPEN ACCESS

Bacterial complexes of urbanozems of some southern cities of Russia

A M Glushakova, L V Lysak, A B Umarova and I A Maksimova

[Open abstract](#), [Bacterial complexes of urbanozems of some southern cities of Russia View article](#), [Bacterial complexes of urbanozems of some southern cities of Russia PDF](#), [Bacterial complexes of urbanozems of some southern cities of Russia](#)

012056

THE FOLLOWING ARTICLE IS OPEN ACCESS

The structure of the prokaryotic communities of the initial stages of soil formation in Antarctic Peninsula

E A Ivanova, G V Gladkov, A K Kimeklis, A A Kichko, D V Karpova, E E Andronov and E V Abakumov

[Open abstract](#), [The structure of the prokaryotic communities of the initial stages of soil formation in Antarctic Peninsula View article](#), [The structure of the prokaryotic communities of the initial stages of soil formation in Antarctic Peninsula PDF](#), [The structure of the prokaryotic communities of the initial stages of soil formation in Antarctic Peninsula](#)

012057

THE FOLLOWING ARTICLE IS OPEN ACCESS

Microbiological activity of permafrost forest soils in Central Yakutia

N P Kuzmina, S V Ermolaeva and A P Chevychelov

[Open abstract](#), [Microbiological activity of permafrost forest soils in Central Yakutia View article](#), [Microbiological activity of permafrost forest soils in Central Yakutia PDF](#), [Microbiological activity of permafrost forest soils in Central Yakutia](#)

012058

THE FOLLOWING ARTICLE IS OPEN ACCESS

Influence of biological product's carriers on the biological properties of oil-contaminated sod-podzolic soil

A V Lednev and A V Lozhkin

[Open abstract](#), [Influence of biological product's carriers on the biological properties of oil-contaminated sod-podzolic soil View article](#), [Influence of biological product's carriers on the biological properties of oil-contaminated sod-podzolic soil PDF](#), [Influence of biological product's carriers on the biological properties of oil-contaminated sod-podzolic soil](#)

012059

THE FOLLOWING ARTICLE IS OPEN ACCESS

Biomarker fatty acids of permafrost peat plateaus of the Komi Republic

E I Lyu-Lyan-Min and I V Gruzdev

[Open abstract](#), [Biomarker fatty acids of permafrost peat plateaus of the Komi Republic View article](#), [Biomarker fatty acids of permafrost peat plateaus of the Komi Republic PDF](#), [Biomarker fatty acids of permafrost peat plateaus of the Komi Republic](#)

012060

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Soil factors affecting the growth and sustainability of spruce stands in the north-eastern Moscow region](#)

O V Martynenko, V N Karminov, P V Ontikov, S A Korotkov and A N Maksimova

[Open abstract](#), [Soil factors affecting the growth and sustainability of spruce stands in the north-eastern Moscow region View article](#), [Soil factors affecting the growth and sustainability of spruce stands in the north-eastern Moscow region PDF](#), [Soil factors affecting the growth and sustainability of spruce stands in the north-eastern Moscow region](#)

012061

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Oribatid mites \(Acariformes, Oribatida\) in mountain-tundra communities of Kozhim River basin \(Subpolar Urals\)](#)

E N Melekhina, N P Selivanova and V A Kanev

[Open abstract](#), [Oribatid mites \(Acariformes, Oribatida\) in mountain-tundra communities of Kozhim River basin \(Subpolar Urals\) View article](#), [Oribatid mites \(Acariformes, Oribatida\) in mountain-tundra communities of Kozhim River basin \(Subpolar Urals\) PDF](#), [Oribatid mites \(Acariformes, Oribatida\) in mountain-tundra communities of Kozhim River basin \(Subpolar Urals\)](#)

012062

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Biodegradable dissolved organic carbon and its optical characteristics within the boggy catchment in the southern taiga of Western Siberia](#)

T V Raudina, I V Krichov, A G Lim and D M Kuzmina

[Open abstract](#), [Biodegradable dissolved organic carbon and its optical characteristics within the boggy catchment in the southern taiga of Western Siberia View article](#), [Biodegradable dissolved organic carbon and its optical characteristics within the boggy catchment in the southern taiga of Western Siberia PDF](#), [Biodegradable dissolved organic carbon and its optical characteristics within the boggy catchment in the southern taiga of Western Siberia](#)

012063

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Early-stage needle litter decomposition in a cowberry-type pine stand in relation to hydrothermal conditions and phytocoenotic factors](#)

A N Solodovnikov

[Open abstract](#), [Early-stage needle litter decomposition in a cowberry-type pine stand in relation to hydrothermal conditions and phytocoenotic factors View article](#), [Early-stage needle litter decomposition in a cowberry-type pine stand in relation to hydrothermal conditions and phytocoenotic factors PDF](#), [Early-stage needle litter decomposition in a cowberry-type pine stand in relation to hydrothermal conditions and phytocoenotic factors](#)

012064

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Soil cover of areas of mining sand and sand-gravel material in the Leningrad region](#)

Y R Timofeeva, E Yu Suhacheva and M K Zakharova

[Open abstract](#), [Soil cover of areas of mining sand and sand-gravel material in the Leningrad region View article](#), [Soil cover of areas of mining sand and sand-gravel material in the Leningrad region PDF](#), [Soil cover of areas of mining sand and sand-gravel material in the Leningrad region](#)

012065

THE FOLLOWING ARTICLE IS OPEN ACCESS

The phytostimulating activity of metal-resistant *Bacillus* strains isolated from Spolic Technosol of Lake Atamanskoe

V V Zinchenko, A V Gorovtsov, T M Minkina, S S Mandzhieva, S N Sushkova, S A Antonenko, E S Fedorenko and P D Pogonyshev

[Open abstract](#), [The phytostimulating activity of metal-resistant Bacillus strains isolated from Spolic Technosol of Lake Atamanskoe](#) [View article](#), [The phytostimulating activity of metal-resistant Bacillus strains isolated from Spolic Technosol of Lake Atamanskoe](#) [PDF](#), [The phytostimulating activity of metal-resistant Bacillus strains isolated from Spolic Technosol of Lake Atamanskoe](#)

5 Mineralogy and micromorphology of soils

012066

THE FOLLOWING ARTICLE IS OPEN ACCESS

Application of the method of thermal analysis to study the composition of chernozem in the European part of Russian Federation

R F Baibekov, S L Belopukhov and H V Charafutdinov

[Open abstract](#), [Application of the method of thermal analysis to study the composition of chernozem in the European part of Russian Federation](#) [View article](#), [Application of the method of thermal analysis to study the composition of chernozem in the European part of Russian Federation](#) [PDF](#), [Application of the method of thermal analysis to study the composition of chernozem in the European part of Russian Federation](#)

012067

THE FOLLOWING ARTICLE IS OPEN ACCESS

Pedo-antrocological characteristics of anthropogenically transformed soils in a case study of the Bolgar historical and archaeological complex in the Republic of Tatarstan (Russia)

A A Golyeva, V Yu Koval, D Yu Badeev and N M Fazuldinova

[Open abstract](#), [Pedo-antrocological characteristics of anthropogenically transformed soils in a case study of the Bolgar historical and archaeological complex in the Republic of Tatarstan \(Russia\)](#) [View article](#), [Pedo-antrocological characteristics of anthropogenically transformed soils in a case study of the Bolgar historical and archaeological complex in the Republic of Tatarstan \(Russia\)](#) [PDF](#), [Pedo-antrocological characteristics of anthropogenically transformed soils in a case study of the Bolgar historical and archaeological complex in the Republic of Tatarstan \(Russia\)](#)

012068

THE FOLLOWING ARTICLE IS OPEN ACCESS

Soils of the Darkhitui catena in the southern Vitim Plateau and their micromorphological features

A B Gyninova, N B Badmaev, Yu B Tsybenov, B N Gonchikov, A Ts Mangataev, A I Kulikov and D P Sympilova

[Open abstract](#), [Soils of the Darkhitui catena in the southern Vitim Plateau and their micromorphological features](#) [View article](#), [Soils of the Darkhitui catena in the southern Vitim Plateau and their micromorphological features](#) [PDF](#), [Soils of the Darkhitui catena in the southern Vitim Plateau and their micromorphological features](#)

012069

THE FOLLOWING ARTICLE IS OPEN ACCESS

Micromorphological features of cryogenesis in the structure of taiga soils on the West Siberian Plain

E A Korkina, M P Lebedeva, A V Rusakov and Iu A Golovleva

[Open abstract](#), [Micromorphological features of cryogenesis in the structure of taiga soils on the West Siberian Plain](#) [View article](#), [Micromorphological features of cryogenesis in the structure of taiga soils on the West Siberian Plain](#) [PDF](#), [Micromorphological features of cryogenesis in the structure of taiga soils on the West Siberian Plain](#)

012070

THE FOLLOWING ARTICLE IS OPEN ACCESS

Clay mineralogy of Cryosols formed in an ultra-continental climate of Siberia

S N Lessovaia, R V Desyatkin, M V Okoneshnikova and A Z Ivanova

[Open abstract](#), [Clay mineralogy of Cryosols formed in an ultra-continental climate of Siberia](#) [View article](#), [Clay mineralogy of Cryosols formed in an ultra-continental climate of Siberia](#) [PDF](#), [Clay mineralogy of Cryosols formed in an ultra-continental climate of Siberia](#)

012071

THE FOLLOWING ARTICLE IS OPEN ACCESS

Shape and structure of cracks in the dry-steppe zone of Northern Kazakhstan

T R Ryspekov

[Open abstract](#), [Shape and structure of cracks in the dry-steppe zone of Northern Kazakhstan](#) [View article](#), [Shape and structure of cracks in the dry-steppe zone of Northern Kazakhstan](#) [PDF](#), [Shape and structure of cracks in the dry-steppe zone of Northern Kazakhstan](#)

012072

THE FOLLOWING ARTICLE IS OPEN ACCESS

Morphological characteristics and features of soils in connection with post-agrogenic and recent climatic trends (a case-study from Central European Russia)

J V Simonova, A V Rusakov, M P Lebedeva, D M Mirin, N A Lemeshko, A G Ryumin and A I Popov

[Open abstract](#), [Morphological characteristics and features of soils in connection with post-agrogenic and recent climatic trends \(a case-study from Central European Russia\)](#) [View article](#), [Morphological characteristics and features of soils in connection with post-agrogenic and recent climatic trends \(a case-study from Central European Russia\)](#) [PDF](#), [Morphological characteristics and features of soils in connection with post-agrogenic and recent climatic trends \(a case-study from Central European Russia\)](#)

6 Agricultural chemistry and soil fertility

012073

THE FOLLOWING ARTICLE IS OPEN ACCESS

Anthropogenic changes in podzolic soils of different biogeocenoses

V F Basevich, I B Makarov and V V Fisenko

[Open abstract](#), [Anthropogenic changes in podzolic soils of different biogeocenoses](#) [View article](#), [Anthropogenic changes in podzolic soils of different biogeocenoses](#) [PDF](#), [Anthropogenic changes in podzolic soils of different biogeocenoses](#)

012074

THE FOLLOWING ARTICLE IS OPEN ACCESS

Structural analysis of the productivity sample on a variety of factors characterizing soil fertility (a possible approach to the solution)

T Yu Bortnik, V F Artyushkin and A Yu Karpova

[Open abstract](#), [Structural analysis of the productivity sample on a variety of factors characterizing soil fertility \(a possible approach to the solution\)](#) [View article](#), [Structural analysis of the productivity sample on a variety of factors characterizing soil fertility \(a possible approach to the solution\)](#) [PDF](#), [Structural analysis of the productivity sample on a variety of factors characterizing soil fertility \(a possible approach to the solution\)](#)

012075

THE FOLLOWING ARTICLE IS OPEN ACCESS

Biokinetic assessment of the nitrogen transformation cycle and turnover of nitrogen pools in the soil–plant system of Asian Russia: experience and results

L V Budazhapov

[Open abstract](#), [Biokinetic assessment of the nitrogen transformation cycle and turnover of nitrogen pools in the soil–plant system of Asian Russia: experience and results](#) [View article](#), [Biokinetic assessment of the nitrogen transformation cycle and turnover of nitrogen pools in the soil–plant system of Asian Russia: experience and results](#) [PDF](#), [Biokinetic assessment of the nitrogen transformation cycle and turnover of nitrogen pools in the soil–plant system of Asian Russia: experience and results](#)

012076

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Drained agricultural landscapes under the impact of airborne industrial pollution](#)

E V Dubina-Chekhovich and O N Bakhmet

[Open abstract](#), [Drained agricultural landscapes under the impact of airborne industrial pollution](#) [View article](#), [Drained agricultural landscapes under the impact of airborne industrial pollution](#) [PDF](#), [Drained agricultural landscapes under the impact of airborne industrial pollution](#)

012077

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Effect of different fractions and dosages of biochar on the properties of two soils contrasting in texture \(model experiment\)](#)

I A Dubrovina

[Open abstract](#), [Effect of different fractions and dosages of biochar on the properties of two soils contrasting in texture \(model experiment\)](#) [View article](#), [Effect of different fractions and dosages of biochar on the properties of two soils contrasting in texture \(model experiment\)](#) [PDF](#), [Effect of different fractions and dosages of biochar on the properties of two soils contrasting in texture \(model experiment\)](#)

012078

THE FOLLOWING ARTICLE IS OPEN ACCESS

[The effect of the tank mixtures of humic substances and herbicides on the abundance of microbial communities in chernozem during chickpea cultivation](#)

A V Gorovtsov, O S Bezuglova, E A Polienko, A V Grinko, O I Naimi, V A Lykhman, M N Dubinina and E S Patrikeev

[Open abstract](#), [The effect of the tank mixtures of humic substances and herbicides on the abundance of microbial communities in chernozem during chickpea cultivation](#) [View article](#), [The effect of the tank mixtures of humic substances and herbicides on the abundance of microbial communities in chernozem during chickpea cultivation](#) [PDF](#), [The effect of the tank mixtures of humic substances and herbicides on the abundance of microbial communities in chernozem during chickpea cultivation](#)

012079

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Effect of lignosulfonate application to sandy soil on plant nutrition and physiological traits](#)

E N Ikkonen and M G Jurkevich

[Open abstract](#), [Effect of lignosulfonate application to sandy soil on plant nutrition and physiological traits](#) [View article](#), [Effect of lignosulfonate application to sandy soil on plant nutrition and physiological traits](#) [PDF](#), [Effect of lignosulfonate application to sandy soil on plant nutrition and physiological traits](#)

012080

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Soil science in the constructive-biosphere paradigm of nature management](#)

V I Kiryushin

[Open abstract](#), [Soil science in the constructive-biosphere paradigm of nature management](#) [View article](#), [Soil science in the constructive-biosphere paradigm of nature management PDF](#), [Soil science in the constructive-biosphere paradigm of nature management](#)

012081

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Carbon-saving technologies in precision farming](#)

A Korchagin, L I Ilyin, R D Petrosyan, I Yu Vinokurov and S G Baranov

[Open abstract](#), [Carbon-saving technologies in precision farming](#) [View article](#), [Carbon-saving technologies in precision farming PDF](#), [Carbon-saving technologies in precision farming](#)

012082

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Agroecological assessment of soils in the foothills of Khakassia](#)

N Kutkina

[Open abstract](#), [Agroecological assessment of soils in the foothills of Khakassia](#) [View article](#), [Agroecological assessment of soils in the foothills of Khakassia PDF](#), [Agroecological assessment of soils in the foothills of Khakassia](#)

012083

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Biochemical transformation of organophosphate matter in soils contaminated with heavy metals](#)

E I Novoselova, O O Volkova and F Kh Xaziev

[Open abstract](#), [Biochemical transformation of organophosphate matter in soils contaminated with heavy metals](#) [View article](#), [Biochemical transformation of organophosphate matter in soils contaminated with heavy metals PDF](#), [Biochemical transformation of organophosphate matter in soils contaminated with heavy metals](#)

012084

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Russian N fertilization trials are a valuable data source for Nitrogen Use Efficiency concept](#)

V A Romanenkov, M V Belichenko, O V Rukhovich, A N Naliukhin, L V Nikitina and O I Ivanova

[Open abstract](#), [Russian N fertilization trials are a valuable data source for Nitrogen Use Efficiency concept](#) [View article](#), [Russian N fertilization trials are a valuable data source for Nitrogen Use Efficiency concept PDF](#), [Russian N fertilization trials are a valuable data source for Nitrogen Use Efficiency concept](#)

012085

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Soil patterns as a factor of crop heterogeneity](#)

I Savin, A M Ali, I Gitas, D E Kucher, P A Dokukin and A K Radzhabov

[Open abstract](#), [Soil patterns as a factor of crop heterogeneity](#) [View article](#), [Soil patterns as a factor of crop heterogeneity PDF](#), [Soil patterns as a factor of crop heterogeneity](#)

012086

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Biological soil activity when applying liquid manure on rice fields in Kuban](#)

A Kh Sheudzhen, O A Gutorova, Yu N Ashinov and V P Kashchits

[Open abstract](#), [Biological soil activity when applying liquid manure on rice fields in Kuban](#) [View article](#), [Biological soil activity when applying liquid manure on rice fields in Kuban PDF](#), [Biological soil activity when applying liquid manure on rice fields in Kuban](#)

012087

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Sustainable rural development in the context of modern political economy discourse](#)

O V Tolstoguzov

[Open abstract](#), [Sustainable rural development in the context of modern political economy discourse](#) [View article](#), [Sustainable rural development in the context of modern political economy discourse PDF](#), [Sustainable rural development in the context of modern political economy discourse](#)

012088

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Transformation of biosystem consolidation of the *Oryza sativa* L. microbocenosis with the introduction of associative rhizobacteria strains](#)

A I Yakubovskaya, Ya V Pukhalsky, N I Vorobyov, S I Loskutov and I A Kameneva

[Open abstract](#), [Transformation of biosystem consolidation of the *Oryza sativa* L. microbocenosis with the introduction of associative rhizobacteria strains](#) [View article](#), [Transformation of biosystem consolidation of the *Oryza sativa* L. microbocenosis with the introduction of associative rhizobacteria strains PDF](#), [Transformation of biosystem consolidation of the *Oryza sativa* L. microbocenosis with the introduction of associative rhizobacteria strains](#)

012089

THE FOLLOWING ARTICLE IS OPEN ACCESS

[The effect of soil salinization and pre-sowing seed treatment with silicon-containing micronutrient fertilizer on barley seedlings](#)

R I Zaitseva, N M Komarov, A S Frid, L M Anikina, A S Zhuravlyova, V V Chumakova, N I Sokolenko and G G Panova

[Open abstract](#), [The effect of soil salinization and pre-sowing seed treatment with silicon-containing micronutrient fertilizer on barley seedlings](#) [View article](#), [The effect of soil salinization and pre-sowing seed treatment with silicon-containing micronutrient fertilizer on barley seedlings PDF](#), [The effect of soil salinization and pre-sowing seed treatment with silicon-containing micronutrient fertilizer on barley seedlings](#)

7 Soil reclamation

012090

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Influence of the hydrological factor on the productivity of winter wheat on the drained soils of the moraine plain](#)

O A Antsiferova

[Open abstract](#), [Influence of the hydrological factor on the productivity of winter wheat on the drained soils of the moraine plain](#) [View article](#), [Influence of the hydrological factor on the productivity of winter wheat on the drained soils of the moraine plain PDF](#), [Influence of the hydrological factor on the productivity of winter wheat on the drained soils of the moraine plain](#)

012091

THE FOLLOWING ARTICLE IS OPEN ACCESS

[The influence of the biochar application on the CO₂ emission from Luvic Anthrosols in the south of Primorsky region \(Russian Far East\)](#)

M A Bovsun, O V Nesterova, V A Semal and N A Sakara

[Open abstract](#), [The influence of the biochar application on the CO₂ emission from Luvic Anthrosols in the south of Primorsky region \(Russian Far East\)](#) [View article](#), [The influence of the biochar application on the CO₂ emission from Luvic Anthrosols in the south of Primorsky region \(Russian Far East\) PDF](#), [The influence of the biochar application on the CO₂ emission from Luvic Anthrosols in the south of Primorsky region \(Russian Far East\)](#)

012092

THE FOLLOWING ARTICLE IS OPEN ACCESS

[The nature of the patchiness of the irrigated fields and the possibility of its recognition on space imagery](#)

I Gorokhova and Ye Pankova

[Open abstract](#), [The nature of the patchiness of the irrigated fields and the possibility of its recognition on space imagery](#) [View article](#), [The nature of the patchiness of the irrigated fields and the possibility of its recognition on space imagery](#) [PDF](#), [The nature of the patchiness of the irrigated fields and the possibility of its recognition on space imagery](#)

012093

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Phytomelioration of orchard agrocenosis as a way to enhance soil fertility and apple trees productivity](#)

O E Klimenko and N I Klimenko

[Open abstract](#), [Phytomelioration of orchard agrocenosis as a way to enhance soil fertility and apple trees productivity](#) [View article](#), [Phytomelioration of orchard agrocenosis as a way to enhance soil fertility and apple trees productivity](#) [PDF](#), [Phytomelioration of orchard agrocenosis as a way to enhance soil fertility and apple trees productivity](#)

8 Degradation, rehabilitation and conservation of soils

012094

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Polycyclic aromatic hydrocarbons accumulation and toxic equivalency factors \(TEFs\) in postpyrogenic soils](#)

E Chebykina, E Abakumov and G Shamilishvilly

[Open abstract](#), [Polycyclic aromatic hydrocarbons accumulation and toxic equivalency factors \(TEFs\) in postpyrogenic soils](#) [View article](#), [Polycyclic aromatic hydrocarbons accumulation and toxic equivalency factors \(TEFs\) in postpyrogenic soils](#) [PDF](#), [Polycyclic aromatic hydrocarbons accumulation and toxic equivalency factors \(TEFs\) in postpyrogenic soils](#)

012095

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Effect of long-term organo-mineral fertilizer application on the fertility of eroded soils](#)

E A Gaevaya, O S Bezuglova, I N Ilyinskaya, S A Taradin, E N Nezhinskaya and A V Mishchenko

[Open abstract](#), [Effect of long-term organo-mineral fertilizer application on the fertility of eroded soils](#) [View article](#), [Effect of long-term organo-mineral fertilizer application on the fertility of eroded soils](#) [PDF](#), [Effect of long-term organo-mineral fertilizer application on the fertility of eroded soils](#)

012096

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Variants of post-agrogenic soil reproduction in agrolandscapes \(A case study in Belgorod region\)](#)

P Goleusov and F Lisetskii

[Open abstract](#), [Variants of post-agrogenic soil reproduction in agrolandscapes \(A case study in Belgorod region\)](#) [View article](#), [Variants of post-agrogenic soil reproduction in agrolandscapes \(A case study in Belgorod region\)](#) [PDF](#), [Variants of post-agrogenic soil reproduction in agrolandscapes \(A case study in Belgorod region\)](#)

012097

THE FOLLOWING ARTICLE IS OPEN ACCESS

[The salt regime of the Manych Valley saline soil complexes](#)

L P Iljina, K S Sushko and V Y Shmatko

[Open abstract](#), [The salt regime of the Manych Valley saline soil complexes View article](#), [The salt regime of the Manych Valley saline soil complexes PDF](#), [The salt regime of the Manych Valley saline soil complexes](#)

012098

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Rock dumps of non-ferrous metallurgy enterprises as an object of recultivation](#)

L P Kapelkina

[Open abstract](#), [Rock dumps of non-ferrous metallurgy enterprises as an object of recultivation View article](#), [Rock dumps of non-ferrous metallurgy enterprises as an object of recultivation PDF](#), [Rock dumps of non-ferrous metallurgy enterprises as an object of recultivation](#)

012099

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Analysis and assessment of the use of chernozems of the Kungur forest-steppe based on remote sensing data](#)

M A Kondrateva and A N Chashchin

[Open abstract](#), [Analysis and assessment of the use of chernozems of the Kungur forest-steppe based on remote sensing data View article](#), [Analysis and assessment of the use of chernozems of the Kungur forest-steppe based on remote sensing data PDF](#), [Analysis and assessment of the use of chernozems of the Kungur forest-steppe based on remote sensing data](#)

012100

THE FOLLOWING ARTICLE IS OPEN ACCESS

[The assessment of soil and land degradation in Volgograd region, the case of agricultural farm Donskoe](#)

N R Kriuchkov and O A Makarov

[Open abstract](#), [The assessment of soil and land degradation in Volgograd region, the case of agricultural farm Donskoe View article](#), [The assessment of soil and land degradation in Volgograd region, the case of agricultural farm Donskoe PDF](#), [The assessment of soil and land degradation in Volgograd region, the case of agricultural farm Donskoe](#)

012101

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Post-agrogenic dynamics of soil properties of eroded agrochernozems in the forest-steppe zone of Western Siberia](#)

S Ya Kudryashova, A S Chumbaev, A A Tanasienko, S V Solovyev, G F Miller, A N Bezborodova and D A Filimonova

[Open abstract](#), [Post-agrogenic dynamics of soil properties of eroded agrochernozems in the forest-steppe zone of Western Siberia View article](#), [Post-agrogenic dynamics of soil properties of eroded agrochernozems in the forest-steppe zone of Western Siberia PDF](#), [Post-agrogenic dynamics of soil properties of eroded agrochernozems in the forest-steppe zone of Western Siberia](#)

012102

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Agro-ecological basis of conservation and reproduction of fertility of agricultural soils in arid territories of Altai](#)

A Kudryavtsev, N Tumbaeva, G Prusakova and L Stupina

[Open abstract](#), [Agro-ecological basis of conservation and reproduction of fertility of agricultural soils in arid territories of Altai View article](#), [Agro-ecological basis of conservation and reproduction of fertility of agricultural soils in arid territories of Altai PDF](#), [Agro-ecological basis of conservation and reproduction of fertility of agricultural soils in arid territories of Altai](#)

012103

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Approbation of various approaches to environmental and economic assessment of soil and land degradation](#)

O A Makarov, A S Stokov, E V Tsvetnov and D R Abdulkhanova

[Open abstract](#), [Approbation of various approaches to environmental and economic assessment of soil and land degradation](#) [View article](#), [Approbation of various approaches to environmental and economic assessment of soil and land degradation](#) [PDF](#), [Approbation of various approaches to environmental and economic assessment of soil and land degradation](#)

012104

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Features of soils and soil formation of natural monument «Park «Sergievka»» \(Saint Petersburg, Russia\)](#)

N N Matinian, K A Bakhmatova and A A Sheshukova

[Open abstract](#), [Features of soils and soil formation of natural monument «Park «Sergievka»» \(Saint Petersburg, Russia\)](#) [View article](#), [Features of soils and soil formation of natural monument «Park «Sergievka»» \(Saint Petersburg, Russia\)](#) [PDF](#), [Features of soils and soil formation of natural monument «Park «Sergievka»» \(Saint Petersburg, Russia\)](#)

012105

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Environmental assessment of the state of urban soils in Petrozavodsk, Russia](#)

S G Novikov, M V Medvedeva and O N Bakhmet

[Open abstract](#), [Environmental assessment of the state of urban soils in Petrozavodsk, Russia](#) [View article](#), [Environmental assessment of the state of urban soils in Petrozavodsk, Russia](#) [PDF](#), [Environmental assessment of the state of urban soils in Petrozavodsk, Russia](#)

012106

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Content of heavy metals \(Zn, Pb, Cu and Cd\) in peat and plants of cutover peatlands](#)

E S Novosyolova, L N Shikhova and E M Lisitsyn

[Open abstract](#), [Content of heavy metals \(Zn, Pb, Cu and Cd\) in peat and plants of cutover peatlands](#) [View article](#), [Content of heavy metals \(Zn, Pb, Cu and Cd\) in peat and plants of cutover peatlands](#) [PDF](#), [Content of heavy metals \(Zn, Pb, Cu and Cd\) in peat and plants of cutover peatlands](#)

012107

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Agroecological assessments of arable and post-arable soils and trends of the post-agrogenic evolution of soils over a 30-year-long period under conditions of changing climate in the northern part of the Upper Volga Region, Russia](#)

A V Rusakov, J V Simonova, A G Ryumin, A I Popov and N A Lemeshko

[Open abstract](#), [Agroecological assessments of arable and post-arable soils and trends of the post-agrogenic evolution of soils over a 30-year-long period under conditions of changing climate in the northern part of the Upper Volga Region, Russia](#) [View article](#), [Agroecological assessments of arable and post-arable soils and trends of the post-agrogenic evolution of soils over a 30-year-long period under conditions of changing climate in the northern part of the Upper Volga Region, Russia](#) [PDF](#), [Agroecological assessments of arable and post-arable soils and trends of the post-agrogenic evolution of soils over a 30-year-long period under conditions of changing climate in the northern part of the Upper Volga Region, Russia](#)

012108

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Semicentennial dynamics of arable lands and fertility arable soils of the Republic of Tyva](#)

A Sambuu, L Golubyatnikov, D Shaulo, O Ajunova and V Zhulanova
[Open abstract](#), [Semicentennial dynamics of arable lands and fertility arable soils of the Republic of Tyva](#) [View article](#), [Semicentennial dynamics of arable lands and fertility arable soils of the Republic of Tyva PDF](#), [Semicentennial dynamics of arable lands and fertility arable soils of the Republic of Tyva](#)

012109

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Short-term changes in chemical properties of topsoil \(0–10 cm\) after low-intensity fires caused by landings of first stages of space rockets Proton-M in Central Kazakhstan](#)

I N Semenov, T V Koroleva, A M Karpachevsky, S A Lednev and A V Sharapova
[Open abstract](#), [Short-term changes in chemical properties of topsoil \(0–10 cm\) after low-intensity fires caused by landings of first stages of space rockets Proton-M in Central Kazakhstan](#) [View article](#), [Short-term changes in chemical properties of topsoil \(0–10 cm\) after low-intensity fires caused by landings of first stages of space rockets Proton-M in Central Kazakhstan PDF](#), [Short-term changes in chemical properties of topsoil \(0–10 cm\) after low-intensity fires caused by landings of first stages of space rockets Proton-M in Central Kazakhstan](#)

012110

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Soil reaction to fire influence in mountain forest-steppe pine forests of Western Transbaikalia](#)

E Yu Shakhmatova
[Open abstract](#), [Soil reaction to fire influence in mountain forest-steppe pine forests of Western Transbaikalia](#) [View article](#), [Soil reaction to fire influence in mountain forest-steppe pine forests of Western Transbaikalia PDF](#), [Soil reaction to fire influence in mountain forest-steppe pine forests of Western Transbaikalia](#)

012111

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Application of rainfall simulator methods for the study of soil processes](#)

Y P Sukhanovskii, A V Prushchik and E V Dubovik
[Open abstract](#), [Application of rainfall simulator methods for the study of soil processes](#) [View article](#), [Application of rainfall simulator methods for the study of soil processes PDF](#), [Application of rainfall simulator methods for the study of soil processes](#)

012112

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Current state of the soil cover of the Don River delta and coastal zone under the conditions of intensified anthropogenic activity](#)

K S Sushko, L P Iljina and L A Bespalova
[Open abstract](#), [Current state of the soil cover of the Don River delta and coastal zone under the conditions of intensified anthropogenic activity](#) [View article](#), [Current state of the soil cover of the Don River delta and coastal zone under the conditions of intensified anthropogenic activity PDF](#), [Current state of the soil cover of the Don River delta and coastal zone under the conditions of intensified anthropogenic activity](#)

012113

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Monitoring the content of PAHs in the former sludge dump near the Seversky Donets River](#)

S Sushkova, T Dudnikova, T Minkina, E Antonenko, A Barbashev, V Chaplygin, I Lobzenko and M Mazarji
[Open abstract](#), [Monitoring the content of PAHs in the former sludge dump near the Seversky Donets River](#) [View article](#), [Monitoring the content of PAHs in the former sludge dump near the Seversky Donets River PDF](#), [Monitoring the content of PAHs in the former sludge dump near the Seversky Donets River](#)

012114

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Monitoring of the polycyclic aromatic hydrocarbons content in chernozem soils under longterm industrial pollution](#)

S N Sushkova, T M Minkina, T S Dudnikova, E M Antonenko, I G Deryabkina, A I Barbashev, E Yu Konstantinova, V D Rajput and A V Barahov

[Open abstract](#), [Monitoring of the polycyclic aromatic hydrocarbons content in chernozem soils under longterm industrial pollution](#) [View article](#), [Monitoring of the polycyclic aromatic hydrocarbons content in chernozem soils under longterm industrial pollution PDF](#), [Monitoring of the polycyclic aromatic hydrocarbons content in chernozem soils under longterm industrial pollution](#)

012115

THE FOLLOWING ARTICLE IS OPEN ACCESS

[Transformation of organic matter of Cisbaikal forest-steppe abandoned lands](#)

S Yu Zorina, L G Sokolova, N V Dorofeev, S G Kazanovsky and E N Belousova

[Open abstract](#), [Transformation of organic matter of Cisbaikal forest-steppe abandoned lands](#) [View article](#), [Transformation of organic matter of Cisbaikal forest-steppe abandoned lands PDF](#), [Transformation of organic matter of Cisbaikal forest-steppe abandoned lands](#)