

SCIENTIFIC  
JOURNAL

**AGRICULTURAL, FOREST  
AND TRANSPORT MACHINERY  
AND TECHNOLOGIES**

Volume X – Issue 1, 2023

Journal of the Agrarian and Industrial Faculty,  
University of Ruse “Angel Kanchev”

ISSN: 2367-5888

© Academic Publishing House University of Ruse  
Agrarian and Industrial Faculty  
Ruse, 2023

## **Editorial Office:**

Scientific Journal

**Agricultural, Forest and Transport Machinery and Technologies**

Academic Publishing House University of Ruse

8 Studentska str.,

7017 Ruse,

Bulgaria

e-mail: [aftmt@uni-ruse.bg](mailto:aftmt@uni-ruse.bg)

### **Editorial Board**

Hristo Beloev, University of Ruse “Angel Kanchev”, Bulgaria

Plamen Kangelov, University of Ruse “Angel Kanchev”, Bulgaria

Pavol Findura, Slovak University of Agriculture in Nitra, Slovakia

Roman Galik, Slovak University of Agriculture in Nitra, Slovakia

Jan Marecek, Mendel University in Brno, Czech Republic

Vladimir Jurca, Czech University of Life Sciences Prague, Czech Republic

Valerii Adamchuk, Institute of Mechanization and Electrification of Agriculture,  
Ukraine

Pavel Machal, Mendel University in Brno, Czech Republic

Jan Turan, University of Novi Sad, Serbia

Stanislaw Sosnowski, University of Rzeszow, Poland

Stepan Kovalyshyn, Lviv National Agrarian University, Ukraine

Djemal Katzitzadze, Agricultural University of Georgia, Georgia

Petar Dimitrov, Institute of Soil Science, Agrotechnologies and Plant Protection

“Nikola Poushkarov”, Bulgaria

Eva Hvizdova, Mendel University in Brno, Czech Republic

Georgi Tasev, University of Forestry – Sofia, Bulgaria

Miho Mihov, Institute of Soil Science, Agrotechnologies and Plant Protection

“Nikola Poushkarov”, Bulgaria

Georgi Komitov, Agrarian University – Plovdiv, Bulgaria

Mitko Nikolov, University of Ruse “Angel Kanchev”, Bulgaria

Kaloyan Stoyanov, University of Ruse “Angel Kanchev”, Bulgaria

Miroslav Pristavka, Slovak University of Agriculture in Nitra, Slovakia

Volodimir Kyurchev, Tavria State Agrotechnological University, Ukraine

Iurie Melnic, Technical University of Moldova, Moldova

<b>CONTENT</b>	<b>Page</b>
<b>Analysis the Process Ejection Cutting Soil of Chain Trenching Machine</b> , Doan Diep, Hristo Beloev	<b>5</b>
<b>Influence of the Composition of the Gas Mixture on the Formation of Welded Coatings During the Restoration of Steel and Cast Iron Parts from Auto Tractors and Agricultural Machinery</b> , Mitko Nikolov, Plamen Kangalov	<b>12</b>
<b>Methods and Tools of Quality Management</b> , Miroslav Pristavka. Ivan Beloev, Pavol Findura, Mitko Nikolov, Anna Sikorska, Marek Gugala, Maciej Kubon, Urszula Malaga-Toboła	<b>17</b>
<b>Determining The Probability of Failure Modes by Fault Tree Analysis</b> , Marián Bujna, Chia Kuang Lee, Miroslav Prístavka, Mitko Nikolov, Todor Delikostov, Adrian Gula	<b>23</b>
<b>Analysis of Market Development and Prices of Selected Oilseeds in Slovak Republic</b> , Zuzana Bajusová, Dominika Čeryová, Jana Ladvenicová, Ľubomír Gurčík, Pavol Findura, Miroslav Prístavka, Ján Jobbágy	<b>31</b>