

AGROSYM

# BOOK OF ABSTRACTS



*XV International Scientific Agriculture Symposium  
"Agrosym 2024"  
Jahorina, October 10-13, 2024*

AgroSym  
2024

AGRO 2024  
sym

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## Impressum

XV International Scientific Agriculture Symposium „AGROSYM 2024“

### Book of Abstracts Published by

University of East Sarajevo, Faculty of Agriculture, Republic of Srpska, Bosnia  
University of Belgrade, Faculty of Agriculture, Serbia  
Mediterranean Agronomic Institute of Bari (CIHEAM - IAMB) Italy

International Society of Environment and Rural Development, Japan  
Balkan Environmental Association (B.EN.A), Greece  
CDR, University of Natural Resources and Life Sciences (BOKU), Austria  
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**Website:**

<http://agrosym.ues.rs.ba>

CIP - Каталогизација у публикацији  
Народна и универзитетска библиотека  
Републике Српске, Бања Лука

631(048.3)(0.034.4)

INTERNATIONAL Scientific Agricultural Symposium "Agrosym 2024" (15 ; Jahorina)  
Book of Abstracts [Електронски извор] / XV International Scientific Agriculture  
Symposium "Agrosym 2024", Jahorina, October 10 - 13, 2024 ; [editor in chief Dušan  
Kovačević]. - East Sarajevo =Istočno Sarajevo : Faculty of Agriculture =Poljoprivredni  
fakultet, 2024. - 1 USB флеш меморија ; 1 x 2 x 7 cm

Системски захтеви: Нису наведени. - Насл. са насл. екрана. - Регистар.

ISBN 978-99976-816-5-2

COBISS.RS-ID 141522433

## ASSESSMENT OF THE SUSTAINABILITY OF SELECTED NEGLECTED AND UNDERUTILISED CROP SPECIES IN NIGER

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### Abstract

There is a gap in the assessment of the sustainability of neglected and underutilized crop species (NUS), especially in developing countries. Therefore, this work assesses the sustainability of six NUS in Niger: sweet potato, cassava, roselle, moringa, okra and Bambara groundnut/voandzou. The assessment was carried out using a framework developed within the project SUSTLIVES (Sustaining and improving local crop patrimony in Burkina Faso and Niger for better lives and ecosystems) that contains 27 indicators related to eight themes covering the three sustainability dimensions (viz. environmental, social, economic). For each NUS, a reference major crop was selected. Data collection was carried out in 2023 through a literature review and, where necessary, interviews with informants and experts. A NUS is considered sustainable if it has a sustainability score equal to or greater than 5 (cf. score of the reference crop), on a 0–10 scale. Results indicate that only okra, moringa and roselle have scores above 5 and are, therefore, sustainable; while the score for sweet potato is close to 5, the cases of cassava and voandzou are more critical. In general, it is at the economic dimension where the lowest scores were recorded. This study provides useful indications on the weaknesses and strengths of the NUS, which should be taken into consideration to improve their performance and sustainability and, therefore, their competitiveness compared to major crops. Particular attention should be paid to social and, especially, economic aspects to ensure the promotion of the concerned NUS in Niger and Sahel.

**Keywords:** *NUS, neglected and underutilised species, sustainability assessment, Sahel, SUSTLIVES.*