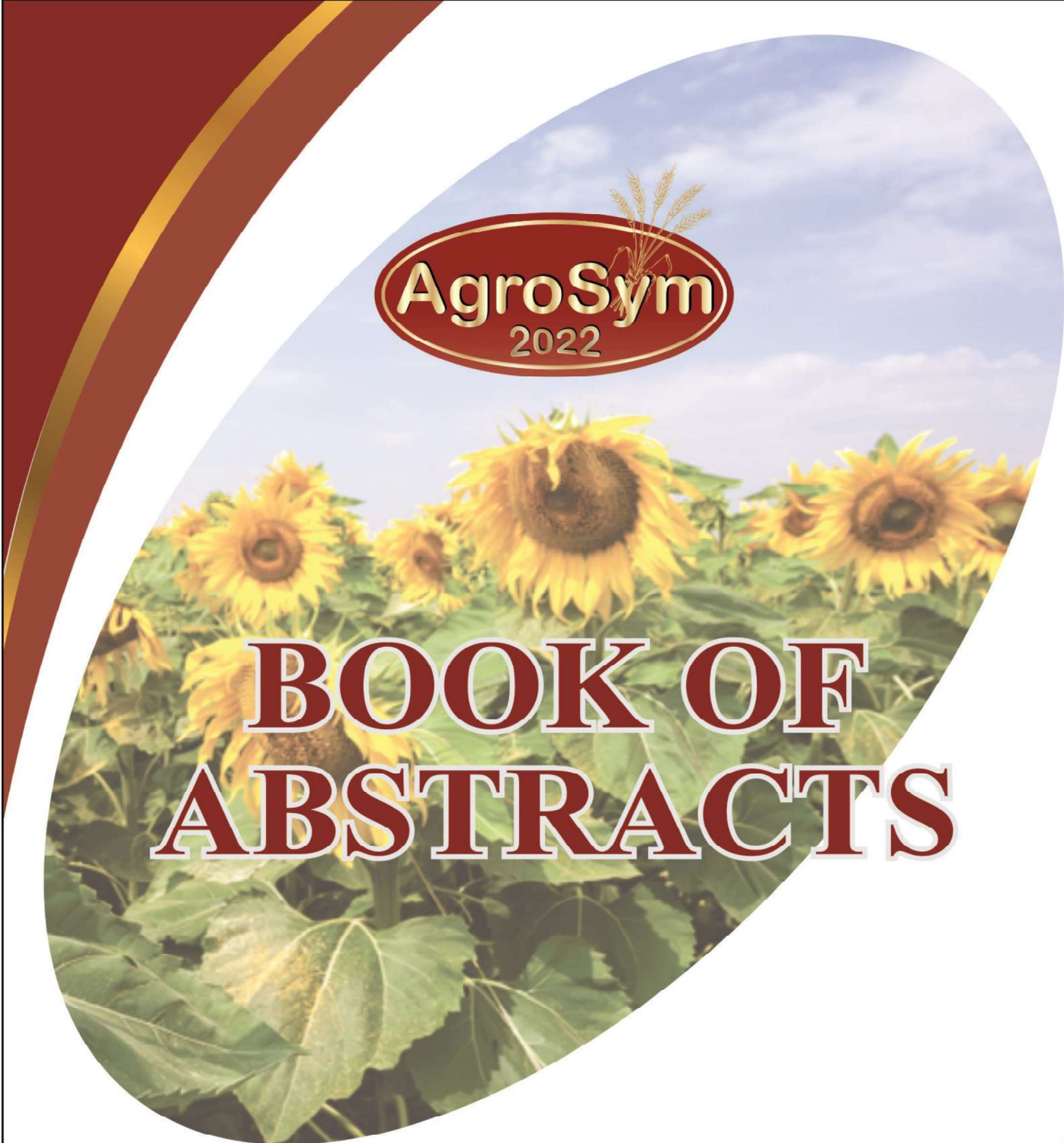




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2022



**BOOK OF
ABSTRACTS**

*XIII International Scientific Agriculture Symposium
"AGROSYM 2022"
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SUSTAINABILITY OF NEGLECTED AND UNDERUTILISED SPECIES (NUS): TOWARDS AN ASSESSMENT MATRIX FOR CROP SPECIES

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Abstract

Neglected and underutilised species (NUS) are widely claimed to contribute to sustainability and sustainable development. Verifying such a claim implies the use of a scientifically sound assessment tool. In this context, the present article aims to suggest a matrix for the assessment of the environmental, economic and social sustainability of NUS. In particular, the paper provides a set of indicators and metrics to assess the different sustainability dimensions. It draws upon a search carried out on the Web of Science in May 2022 that returned 126 records. Eligible documents underwent two steps: in the first step, indicators, metrics and criteria regarding sustainability were identified; in the second step, expert knowledge was used to systematise the identified indicators and metrics according to the three sustainability dimensions and group them into themes. Agronomic aspects were included in the environmental dimension while nutrition, health and cultural aspects were included in the social dimension. One of the main results of the analysis is that there is a dearth of quality scholarly documents dealing with the assessment of NUS sustainability. Furthermore, economic and social indicators and metrics are hard to find. The operationalisation of the proposed indicators requires their contextualisation taking into consideration the conditions in each country/territory as well as the NUS concerned. A further important step to operationalise the proposed matrix implies the identification of a sustainability threshold and an assessment scale for each indicator. Apart from sustainability assessment, the proposed assessment matrix can allow selecting the NUS that have the highest potential and whose promotion can contribute to the sustainable development of the concerned countries and territories.

Keywords: *orphan crops, environmental sustainability, economic sustainability, social sustainability, sustainability assessment.*