

ISSN 2637-3298



UNIVERZITET PIM BANJA LUKA
UNIVERZITET ZA POSLOVNI INŽENJERING I MENADŽMENT

**XI INTERNATIONAL CONFERENCE ON SOCIAL AND
TECHNOLOGICAL DEVELOPMENT – STED 2022**

THE BOOK OF ABSTRACTS

**XI MEĐUNARODNA KONFERENCIJA O DRUŠTVENOM I
TEHNOLOŠKOM RAZVOJU – STED 2022**

ZBORNIK IZVODA RADOVA

Trebinje, June, 02-05, 2022

Trebinje, 02.- 05. juni 2022. godine

Co-organizers:



Fakulteta za logistiko



VUB
VISOKA ŠKOLA ZA USLUŽNI BIZNIS



X INTERNATIONAL CONFERENCE ON SOCIAL AND TECHNOLOGICAL DEVELOPMENT

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Publisher:

University PIM, Banja Luka, Republic of Srpska, B&H

For publisher

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Editorial board:

Dejan Kojić, PhD, Vice-Rector for Science

Design and Computer processing:

Ljubica Janjetović, PhD, Assistant Professor

Print:

„Sitoteka“ Banja Luka

Circulation:

150 copies

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The authors have full responsibility for the originality and content of their own papers.

TEXTURAL PROPERTIES OF PASTA SUPPLEMENTED WITH WILD GARLIC

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ABSTRACT

Pasta is a widely consumed cereal-based product all over the world. Pasta products are very popular due to their nutritional compositions, long shelf life, and availability in the market, low cost, simplicity of preparation, and transportation. In line with sustainable production and food strategies for the future, it is recommended that produce enrich pasta with nutritionally valuable compounds based on economically affordable raw materials. Recently, wild edible plants have been used significantly due to high content of bioactive compounds that are beneficial to health. One of such plants is wild garlic (*Allium ursinum L.*) that is a wild edible, spicy plant, very similar to garlic, ideal for removing toxic substances that are stored in the body, and for antiseptic and antimicrobial action. The results present textural characteristics of pasta supplemented with wild garlic powder (5, 7, 9% on d.w.), extract (20, 30, 40% on d.w.) and encapsulate (3, 5 and 7% on d.w.). In comparison to the control (95.45N), significant increase of hardness was reached in case of supplementation with moderate (125.50N) and high levels of wild garlic powder (119.08N) and high levels of extract (117.08N). In contrast, lower and mid levels of encapsulated garlic decreased pasta hardness (78.43N and 81.66N respectively), which may be due to the presence of maltodextrin as a carrier in encapsulate matrix. It was observed significant increase of adhesiveness in pasta supplemented with powdered wild garlic at all levels as well as for high supplementation levels of encapsulated and extracted wild garlic.

Keywords: pasta, wild garlic, hardness, adhesiveness.