

DIGITAL METHODS FOR DOCUMENTING, PRESERVING, AND TRANSMITTING TRADITIONAL KNOWLEDGE IN THE FIELD OF NATURAL TEXTILE DYEING

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Abstract

This study focuses on the role of various digital strategies for the preservation, documentation, and revitalisation of traditional practices in natural textile dyeing. Based on long-standing knowledge of natural dyes, these practices represent an essential element of intangible cultural heritage. However, they are under significant pressure from industrialisation and are further threatened by the disruption of intergenerational transmission. The study examines digital archives and databases, online educational platforms and communities, as well as tools for visualisation, analysis, and reconstruction (including laboratory methods for research and possibilities for mapping dye plants). International practices and European initiatives are presented, alongside Bulgarian examples. Key issues related to the ecological and ethical aspects of using natural dyes are discussed, such as traceability and certification, as well as the role of international standards for accessibility, sustainability, and data management. In conclusion, the paper highlights that digital strategies not only preserve traditional knowledge but also create new opportunities for creative interpretation, education, and intercultural dialogue, linking local communities, research practices, and contemporary design within a shared and sustainable ecosystem.

Keywords: *natural dyeing; digital archives and databases; intangible cultural heritage; dye analysis; sustainability and ethics; digital mapping.*