IDENTIFYING KNOWLEDGE GAPS WITH ADJACENCY MATRICES: THE CASE OF GBF

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Abstract body

The quality and quantity of potentially available data overwhelmingly exceed the contemporary processing capacities of individuals and organizations. Hence, the issue of knowledge gaps, understood as a lack of necessary and sufficient information in a particular field of action, becomes burning. Overcoming this issue is critical for the effectiveness of the program described in Kunming-Montreal Global Biodiversity Framework (GBF).

The paper presents an original procedure for aiding the comprehensive identification of knowledge gaps in GBF programming documents. Based on the adjacency matrix approach, the content analysis of relations between concepts used in Kunming-Montreal GBF will be discussed. Attention was paid to explicit and implicit sources of knowledge gaps within Section G (Goals) and Section H (Targets) of GBF. The knowledge gap was operationalized as the lack of information about the links between phenomena represented by a set of concepts included in Kunming-Montreal GBF.

Adjacency matrices are used in cognitive mapping studies (Axelrod 1976, 2015; Kosko 1986) and have roots in graph theory. Our results demonstrate the effectiveness of the adjacency matrix approach for identifying knowledge gaps in actions programmed in the GBF.

The study is part of the Emys-R project (www.emysr.cnrs.fr).

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