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An on-line information portal for environmental decision support through ecosystem health

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An On-Line Information Portal for Environmental Decision Support through Ecosystem Health

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Abstract: In this study, we apply a holistic approach to sustainable environmental management on the basis of the notion of “ecosystem health”. Conducting systematic literature search using online scientific citation indexing services, like Web of Science, Google Scholar and Scopus, we identify relevant publications. Text mining techniques are utilized to derive context-related information from bibliographical sources and to produce a set of representative markers of ecosystem health. A number of integrated characteristics of ecosystem status and their applicability to the task of sustainable development is examined to produce a set of the most appropriate indicators. This knowledge is then transformed into an interactive web-based information portal to be used by researchers and practitioners to solve a wide spectrum of scientific and practical problems. The conference presentation will discuss underlying theoretical concepts and showcase a prototype of the open source information portal.

Keywords: Ecosystem health; holistic approach; text mining; information portal.