
CONTRIBUTION TO THE KNOWLEDGE OF TREE SPECIES OF LAO PDR WITH IDAO SYSTEM

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Résumé

The implementation of biodiversity conservation actions depends on our capacity to measure and map their components. To achieve this important work it is necessary to know the identity of the species in order to organize their inventory. With the aim to contribute to reducing the "taxonomic impediment", we use the interactive computer-aided identification system called IDAO. Within the framework of the Forest Biodiversity Inventory in Lao PDR (Opération Canopée, Hallé et al.), we enrich an existing knowledge base. In this study, we focused on the Phou Hin Poun National Park, Khammouane province. This location offers a variety of contrasting sites in a karstic valley. Thus, among more than 300 trees samples, 115 were analyzed, 104 were identified at species level and 11 at genus level. Our results show a high trees species diversity of which more than 10% would be new for the country. Making available such results of the widest audience with a simple and efficient identification tools is one condition for the protection of tropical forest resources and particularly trees. In this sense, IDAO system allows a non-expert user to identify species in the field. In effect, it was designed for training purposes and to help non-botanists in the identification process. Unique in its kind, this identification system is completely graphic. It built a theoretical plant following botanical characters selected by the user. It differs from classical dichotomous keys offering a multi-entry system, allows identification of incomplete samples and certain level of observational errors. IDAO enables users to make determinations of taxa by an algorithm, generating rules as required at any stage of identification, as the way by which experts do. We emphasize the needs for more plant collecting and identification work in this region to improve training and capacity building in plant taxonomy through IDAO approach.

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