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Succinct insight of the Ecological Indices for plant species

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Abstract : <u>Introduction</u>: It is reasonably multifaceted to enumerate biodiversity, because of the colossal amount of indices predictable for this purpose. Ecological indices intend to epitomize the general attributes of communities that consent to compare different regions, taxa, and trophic levels as well. These indices are of simple significance for environmental monitoring and conservation. There is no accord about, for the indices for their appropriateness and information shared.

Objective: Several common ecological/diversity indices in an array from simple to complex statistical analyses have been discussed in order to determine which indices are better apposite for definite analyses. The common diversity indices such as Species richness (S), Shannon's diversity (H'), Simpson's diversity(D1), Simpson's dominance (D2), Simpson's evenness (E), and Berger–Parker dominance (BP) have been discussed in this insight. The trait based measures of diversity allows having an insight whether or not they perform similarly to the superior studied species diversity. Path analysis can be employed for the determination whether compound indices detected additional liaisons between diversities of diverse organisms and traits than basic indices.

<u>Conclusion</u>: Thus, this exhibited that common diversity indices emerge interchangeable in simple analyses. But when taking into account for the complex interactions, the preference of index can intensely amend the construal of results. Data mining for the identification of the index, producing the most momentous results should be circumvented. But at the same time allowing for analyses using multiple indices provides superior insight into the interactions in a system.

Keywords: Ecological indices, Common diversity indices, Plant species, Path analysis, path models.

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