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The diversity and ecology of epiphytic lichens in "Evolution Canyon" II, Lower Nahal Keziv, Upper Western Galilee, Israel

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Scientific Journals Home Page <u>Abstract:</u> Different populations of epiphytic lichens were studied in a microsite in Lower Nahal Keziv, Western Upper Galilee, Israel, which is designated as an "Evolution Canyon" (EC) II. In all, 24 lichen species from 5 orders, 11 families, and 17 genera were registered, about one third of them (7 species) for the first time in Israel. Species richness was higher on the warmer, drier, climatically more fluctuating and biotically more heterogeneous south-facing slope (SFS). Most lichens of EC II were mesophytic and photo-indifferent species; however, humid and shaded habitats of the north-facing slope (NFS) and valley bottom (VB) were characterised by a dominance of moderately photophytic species and a high frequency of hygrophytic species, while dry and sun-exposed habitats of the SFS were characterised by a dominance of very photophytic and xerophytic species. In all, 6 environmental variables were evaluated at the research site. Canonical correspondence analysis (CCA) was used to determine the influence of these ecological variables on lichen diversity and morpho-anatomic characteristics of the lichens in EC II.

Key words: Epiphytic lichens, species diversity, ecology, biogeography, reproductive strategy, canonical correspondence analysis

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