**AN FIRST ASSESSMENT OF *Buellia* s.l. FROM THE GALAPAGOS ISLANDS: SPECIES CONTAINING XANTHONES**

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The genus *Buellia* remains one of the largest, poorly resolved genera of crustose lichens world-wide. A global revision based on existing data is challenging because of an enormous diversity in the group. In the Galapagos Islands, species of *Buellia* s.l. are very common, widely distributed and unusually diverse. As a first step towards a more comprehensive revision, we decided to focus on a group easily separated – specimens containing xanthones recognized by their pale yellowish green thalli, displaying a UV+ bright yellow to bright orange fluorescence and/or a C+ orange spot test reaction. The heterogeneous group represents an assemblage of taxa that are not closely, phylogenetically related. Secondary chemistry of the specimens was analyzed with thin-layer chromatography, first using standard solvent system C to confirm the presence of xanthones, then examining specimens further in solvent F, comparing specimen extracts with samples of pure xanthones. Documenting their morphology, anatomy and secondary chemistry, we present here a dichotomous key to distinguish the species. Ultimately these results will contribute to a more comprehensive phylogenetic revision, also employing molecular tools.