Species discovery among British Columbia's fibre cap mushrooms: A more complete phylogeny of the *Inocybe "praetervisa"* group

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Course: ENVR 449, Honours Graduating Essay Instructor: Leah May Ver

A graduating thesis submitted in partial fulfilment of the requirements for the degree of Bachelor of Environmental Sciences (Honours) in The Faculty of Science Department of Earth, Ocean, and Atmospheric

We accept this thesis as confirming to the required standard Supervisor: Dr. Mary Berbee Committee Members:

University of British Columbia, April 4th, 2019

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<u>Abstract</u>

Inocybe section Marginatae includes difficult species complexes and many as-yet undescribed species. In British Columbia, Canada, specimens identified under as three different species representing the Inocybe praetervisa clade in Sect. Marginatae have been collected repeatedly. Although the I. praetervisa clade is better studied than many other groups, knowledge about its species diversity still has gaps. This became evident when analysis of the DNA sequences of the ITS and RPB2 region showed that BC specimens were divided into three well-supported clades, provisionally named Species 4, 5, and 7, all of which differed from published species of the I. praetervisa clade. 'Species 4' was represented by 6 collections which consistently formed their own clade concluding it to be a novel species. Species 5 consistently formed its own clade but represented by only three samples from one locality, within-species variation could not be assessed. Species 7 was distributed with I. salicis-herbaceae and I. phaeocystidiosa. Research from this study demonstrates the difficulty of morphological species identification because of the overlap of morphological characteristics. It highlights the utility of molecular analysis of both ITS and RPB2 regions for further studies on the Inocybe praetervisa clade.