EFFECTS OF *Hexastylis Arifolia* Oil Extract On PC12 Cell Cultures

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**Abstract**

The potential beneficial compounds found in plant extracts are being studied as cheaper alternatives to pure compounds, and as exciting discoveries for interactive effects between multiple compounds. The current study obtained oil extracts from the roots of a plant used in Native American medicinal tonics, *Hexastylis arifolia* (wild ginger), for possible protective effects in PC12 cells treated with NGF. The extract was found to increase both neurite outgrowths and neurite length when exposed to the 60 µg/mL methanol extraction (.014 and .047). We did not find a dose-dependent relationship as higher doses may be linked to cell death, but lower concentrations of *H. arifolia* oil may be an exciting candidate for future studies in neuroprotective chemicals.