Medicinal Properties of Lomatium dissectum and Sambucus caerulea

Melendez, Tziavi (School: Owyhee High School)

My research investigated the medicinal properties of Lomatium dissectum (called “doza” in our Native language) and Sambucus caerulea (elderberry, “hubui”) under laboratory conditions. Would laboratory experiments confirm that Lomatium dissectum and Sambucus caerulea have medicinal properties? Native Americans have successfully used plants with medicinal properties for thousands of years. Lomatium.dissectum and Sambucus caerulea both grow in our region and are still used today for their healing properties. I hypothesized that both Lomatium dissectum and Sambucus caerulea would be effective against cancer cells and bacteria. Lomatium dissectum tea was prepared by boiling the dried root of the plant in water for 30 minutes. Elderberries were harvested in our area in the fall and made into juice. The juice was then preserved in a freezer. Both plant preparations were applied to lung cancer cells and to three different types of bacteria. A microdilution assay and a disk diffusion assay were used to test the effect of Lomatium dissectum and of Sambucus caerulea on the bacteria. An AlamarBlue assay was used to test the effect of both plants on lung cancer cells. Based on my results, dilutions of elderberry juice effectively inhibited the growth of lung cancer cells. Dilutions of elderberry juice were also effective against Staphylococcus epidermidis. Lomatium dissectum showed little effect on cancer and bacteria cells in my laboratory tests. My hypothesis was partially confirmed. Sambucus caerulea inhibited the growth of both lung cancer cells and Staphylococcus epidermidis. Further tests should be conducted with Lomatium dissectum.

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