

Pit-Cooking Balsamroot

The arrowleaf balsamroot (*Balsamorhiza sagittata*) is a plant in the sunflower family that grows abundantly in western North America.

All parts of the plant can be used. In the past, the leaves, stems, shoots and seeds were eaten or used as medicine. But the most important part was the taproot.

The root of the balsamroot is an important food source for many BC First Nations of the interior and in the Fraser Valley. In the past it was a staple food that provided nutrition and energy throughout the year. As well, it provides a useful medicine.

Using the taproot is labour intensive. It is not easy to dig, and has to be peeled, a difficult and time consuming job.

A main component of the taproot is the carbohydrate inulin. However, inulin is indigestible by humans. How could the root become a staple food source if most of it is indigestible?

Indigenous people perfected a cooking technology that converted the inulin to simple sugars, making the root not only taste better, but become digestible and provide available energy sources.

This technology is the earth oven or pit-cooking which involves a slow cooking period in an enclosed pit in the ground.

There are a number of essential conditions that need to be met to successfully produce the edible food.

These include:

- adequate temperature for a sustained period of time, provided by fire-heated rocks
- adequate moisture, provided by steam from water added at a specified point in the cooking process
- adequate acidity, provided by volatile organic acids emitted by moistened plants added to the pit