

Investigation



① Shirakami Mountain Range Water

- Soft water
- Grand Water

② Shirakami Kodama Ferment

The Koubo yeast is selected and separated from forest of world natural heritage.

In 1997, Koubo yeast use for a bread is picked from leaf world in heritage of designated area. It was developed by Kenkichi Kodama (a doctor of engineering) with food research institute. They selected fermentable thing, multiplicative thing, preservative thing from 500 plants separated leafmould and then remains and became only bread making wild yeast.

③ Baking powder

Kind of rising agent used for bread and baked confectionery. Sodium bicarbonate becomes the basis, and acid agents such as tartaric acid hydrogen potassium and phosphoric acid calcium become an auxiliary that can help resolution of sodium.

④ Koubo yeast

When we make bread, we can use to make a gas.

⑤ Yeast

Yeast is the same as koubo yeast. There are purposes of its use. For example, bread, wine, beer...

Ecology

in

Shirakami Mountain

HIROSAKI MINAMI
HIGH SCHOOL

First grader 15HR group4

Member

Purpose

In order to use Shirakami mountains resources.

We make bread of Shirakami's water and a yeast fungus in Shirakami's fallen leaves. And we make Shirakami's economy effect.

We try to advertise Shirakami's bread and increase whole sales with other products.

Hypothesis

We have two main Hypotheses. First, is there difference between familiar hot spring and tap water? Second, does it change taste according to the quality of the water?

Method

We examine the water, (Tap water and hot spring in Douga tai.)

Procedure

1. collect water
2. Examination of the water by using a machine called spark.
3. Put data in chart.

Result

	Tap water	local water	hot spring
<u>Dissolved oxygen</u>	20.0 mg/L (100%)	17.7 mg/L (88.5%)	11.2 mg/L (56.0%)
<u>conductivity</u>	117 ms/cm	115 ms/cm	114 ms/cm

conductivity This index shows that electricity flows easily in liquid with higher conductivity when conductivity is high water looks dirty.

Dissolved oxygen A quantity of dissolved oxygen in the water.

Result ②

We consider tap water is more clean than local water and hot spring, But actually the result of hot spring is the most clean of the three.

Consideration

We wonder if water in Shirakami is delicious because it has well-balanced ingredient such a calcium, magnesium, mineral or no ingredient in tap water

★ Are there any differences between Koubo yeast from fallen leaves and yeast that are put on the market.