

For example ①

About apple in Aomori.
In apple's research institute
in order to make an apple of
high quality and good taste
They start to grow a seed
from 1928.

They chose best tasting apple
irrespective of harvest time.
They have been published 40
kind of so far.

For example

○ If you grind flesh of apple
The color doesn't change.

○ It is easy to bite into an apple.
Because the skin of apple is thin.

○ It's delicious until next summer.

○ An apple usually harvested in
fall can be harvested even
in August.

For example ②

Also there are apples like this.

○ It is easy to cultivate apple

• A kind of apple tree with
few branches

⇒ Caramura trees

• A kind of apple tree little labor
to thin out extra fruit.

⇒ Ayaha

○ Apple produced without
agricultural chemicals

• Put disease resistant properties
of wild species in apple

⇒ Aomori 25

Aomori's apple have many
kind of apples

For example, Fuji, Outin, Jonagold,
Gunmamegetsu and so on.

The taste have a tart apple and
a sweet apple.

Some apples have a very strong
acid taste others tastes very sweet.

Let's

Extract

Apple's DNA.

HIROSAKI MINAMI

HIGH SCHOOL

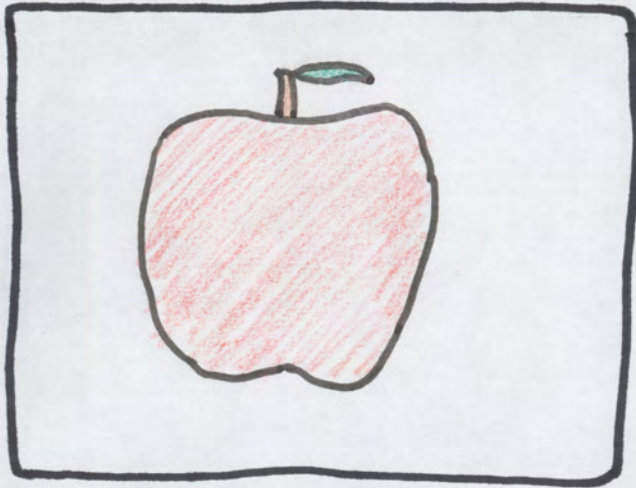
FIRST grader 15 HR group 6

[Purpose]

Extracting and observing apple's DNA

[Hypothesis]

DNA differs depending on the species that sequence of DNA.

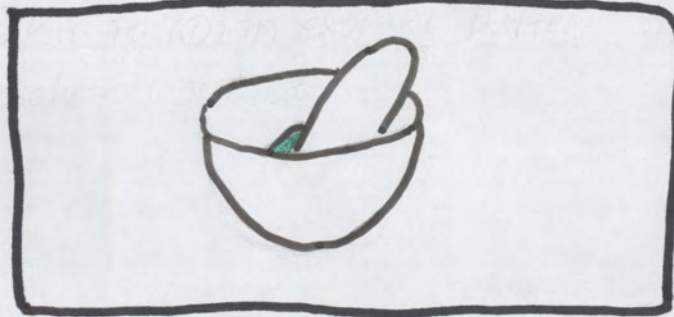


[Items for research]

- Apple leaf
- Flesh of apple
- Liquid nitrogen
- Sampling buffer solution.
- Ethanol

<< METHOD >>

① Put cut leaf and liquid nitrogen in a mortar and mash it.

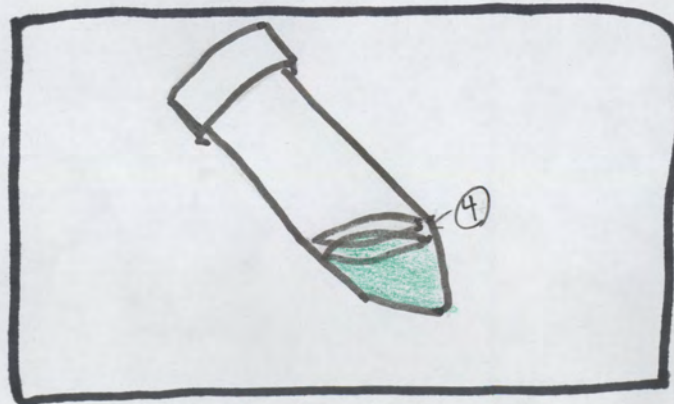


② Put it (①) in extract buffer solution and stir it.

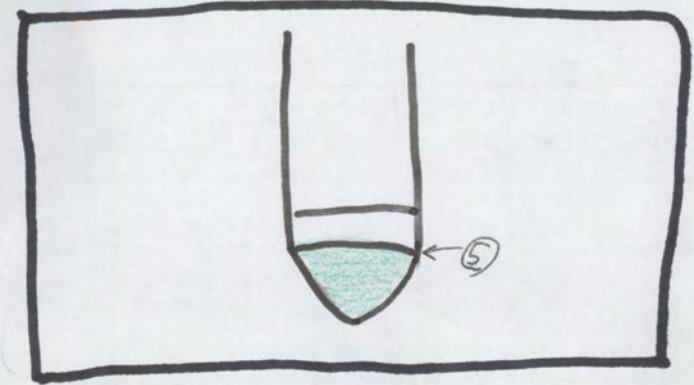


③ Centrifuge this liquid.

④ Suck up this layer of the bottom.



⑤ Appear DNA in it and take DNA by using a stick.



[RESULT]

- We can extract DNA
- We found that the amount of DNA in leaves has more than those in fruits.

