

It Starts with Eggshells

-An Environmental Improvement Project-

Pool Gakuin
High School

1. Our activities

We participate in activities called Glocal Study. It is the class where we solve global and local issues. Our team focused on agricultural issues. Then, we planned to produce liquid fertilizer that promotes plant growth, using calcium from eggshells.

2. Preparation

Our purpose for creating the egg art was to spread awareness of our activities within the school, and gain support. We created it and displayed at our school. These actions help us to receive support within our school. As a result, the school allowed us to continue production cost to continue.



3. Calcium Liquid Fertilizer[CLF]

We used 100ml of vinegar. We decided to make the vinegar ourselves. We contacted a vinegar company to get fermentation bacteria.

Now, we're also producing our own vinegar. Furthermore, we conducted experiments to carefully examine the effectiveness of our self-produced CLF. We tested our self-produced fertilizer.



Compared

1. water
2. commercial fertilizer
3. citric acid liquid fertilizer
4. CLF made solely from rice
5. CLF containing alcohol, etc.

4. Results and Conclusion

- differences in how the plant grew when CLF was used
- no significant difference in weight
- the most balanced CLF used was 120ml of CLF containing alcohol, etc.

In the future

We have some big goals. There are two of them.

1. To use our own vinegar to make CLF.
2. To donate our CLF to a Japanese agriculture group.

