

⑤(田村班)

Application of Hyogo Prefectural Flower Nojigiku in Science Education  
~ To Foster Interest in Local Nature ~

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Abstract

The purpose of this research is to foster an interest in local nature through learning about the prefectural flower, Nojigiku. The awareness of it was only 7% in the result of our survey. In order to raise awareness of Nojigiku, we thought it would be important to use it as a science teaching material.

1 Experiment

- ① Cultivation of Nojigiku
- ② Starch detection
- ③ Transpiration experiment
- ④ Separation of photosynthetic pigments

2 Results

- ① (1) The germination rate decreased after the second week.  
(2) It rooted, but the top of the stem rooted more successfully than the bottom.
- ② Nojigiku turned blue-purple and showed reaction.
- ③ Leaves showed more transpiration, and the underside of the leaves showed more transpiration than the front side.
- ④ Chlorophyll and chlorophyll b were identified, but no carotenoid pigments were observed.

3 Conclusion

Cuttage experiment, Transpiration experiment, and Starch detection experiment can all be used in teaching.

4 References

- Keirinkan Miraie Hirogaru Rika<sup>1,2,3</sup> Wakuwaku science<sup>3,4,5,6</sup>  
Wikipedia.org/wiki/Nojigiku  
Homepage of Hyogo Prefecture (<https://web.pref.hyogo.lg.jp/index.html>)