⑧(蔵屋班)

『Pursuing the Scent of Domestic Cypress』

～Comparison with Taiwanese Cypress～

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1　Abstract

We wanted to create perfume that was kind to the environment. We conducted steam distillation on Taiwan's and domestic cypress and the floral water extracted had the typical "hinoki" scent. The leaves smelled stronger than wood, and Taiwan cypress included many components that domestic cypress didn't.

2　Introduction

When we researched cypress, we found that the cypress's fragrance component "hinokitiol" was contained in Taiwan cypress, but not in domestic cypress. Our goal was to find the fragrance compound that creates a strong hinoki scent.

3　Theory and Experiment

①We extracted cypress essential oils by steam distillation by changing the part of the raw material and the soaking time.

②We were able to see white fibrous material in the floral water. We analyzed it by IR measurement using ATR method.

③Components of essential oils were analyzed using GC-MS. Two essential oils prepared in Experiment 1 and commercial essential oils (Cypress and Taiwan Cypress) were used.

4　Results and Discussion

① Essential oil was extracted. The amount of essential oil extracted from the leaves was greatest.

②IR measurements were compared with previous literature and the material was found to be wood cellulose.

③The components detected in essential oils were different substances than in previous literature, suggesting components of Hinoki vary depending on habitat.

5　Conclusion

We thought that domestic cypress contained a component that could replace hinokitiol. However, Taiwanese cypress contained more aromatic compounds than domestic Cypress. In addition, since leaves contained more aromatic compounds than the center of tree, we inferred leaves had a stronger fragrance.