

Classification of agarwood types (malaccensis and crassna) between oil and smoke using E-nose with CBR classifier

Mujahid Mohamad, Muhammad Sharfi Najib, Suhaimi Mohd Daud, Nurdiyana Zahed, Muhamad Faruqi Zahari, Nur Farina Hamidon Majid, Suziyanti Zaib and Hadi Manap
Universiti Malaysia Pahang, Pahang, Malaysia

ABSTRACT

The issue of quality of agarwood quality among sellers and buyers is still ongoing due to manual olfactory methods. This study purpose classification of Malaccensis and Crassna agarwood in oil and smoke by electronic nose using Case-based Reasoning classifier. The CBR performance measurement shows that classification of agarwood Malaccensis and Crassna for both oil and smoke using CBR technique can achieve 100% classification success.

KEYWORDS

E-nose; CBR; Agarwood; Malaccensis; Crassna; Intelligent classification

ACKNOWLEDGEMENTS

This research and development are supported by Bio-Aromatic Research Centre of Excellent (BARCE) University Malaysia Pahang (UMP) and Malaysia Technical University (MTUN) RDU192803 grant.