Review Study of Agarwood Oil and Its Quality Analysis

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Abstract

This paper presents an overview of analysis agarwood oil and its quality grading. The review suggested agarwood oil can be graded according to their chemical properties and so that there is a common standard recognized worldwide on grading the agarwood oil. Analysis based on chemical profiles is required to ensure that agarwood oil can be classified based on their respective classes or grades where the accurate results can be measured. Conventionally, the grading of agarwood oil is performed by trained human graders (sensory panels) depends on its physical appearance such as color, odor, high fixative and consumer perception. However, this method is limited due to human nose cannot accept many samples in one time and easily get fatigues especially when dealing with continuous production.The human sensory panel also limited in terms of subjectivity, poor reproducibility, time consumption and large labour expense. These are constraining factors in increasing agarwood oil trade and market penetration.

Keywords: Grading; agarwood oil; chemical compounds; signal processing