## Bioinformatics analysis and expression study of oil palm boron transporter (*EgBOR2*)

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Abstract: Boron (B) is one of the most important microelement for oil palm which is one of the most important economic crop of Thailand. Boron is less required but cannot be deficient. Boron deficiency affects some important stage during the growth of oil palm and cause yield reduction significantly. However, there is very little knowledge has been known about how boron is taken up and transported in oil palm. Therefore, the expression study of a boron transporter gene in oil palm, *EgBOR2*, responded to boron application is very important. In this work, the effects of developmental stages and boron application on the expression of *EaBor2* gene in 3 varieties, Suratthani 1, 2 and 7 (Su1, Su2, Su7) were investigated. The oil palms were grown in two systems, hydroponics and in pot condition for 2 weeks and 4 weeks, respectively, under controlling the amount of boron application. To study the expression of *EgBor2* gene in oil palm, a semi-quantitative RT-PCR technique was performed. The results of oil palm seedlings grown in hydroponics showed an up – regulation of *EgBor2* gene expression in most oil palm varieties when treated with boron especially in Su2 variety.

**Biography:** Miss Kwanhathai Sinsirimongkol is a PhD. student at the age of 32 years from Biotechnology Department, Mahidol University, Thailand . She is a Thai government scholarship Student.



## **Publications:**

 Evaluating the Mechanical Properties of Admixed Blended Cement Pastes and Estimating its Kinetics of Hydration by Different Techniques
Genetic Diversity Using Random Amplified Polymorphic DNA (RAPD) Analysis for Aspergillus niger isolates
Au-Ag-Cu nanoparticles alloys showed antifangal activity against the antibiotics-resistant Candida albicans
Induce mutations for Bavistin resistance in Trichoderma harzianum by UVirradation
Biliary Sludge. Analysis of a Clinical Case

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