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 EgBOR2 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:
2. Genetic Diversity Using Random Amplified Polymorphic DNA (RAPD) Analysis for Aspergillus niger isolates
3. Au–Ag–Cu nanoparticles alloys showed antifungal activity against the antibiotics-resistant Candida albicans
4. Induce mutations for Bavistin resistance in Trichoderma harzianum by UV-irradiation
5. Biliary Sludge. Analysis of a Clinical Case

Abstract Citation: Miss Kwanhathai Sinsirimongkol, Bioinformatics analysis and expression study of oil palm boron transporter (EgBOR2) Sydney.Australia, february 10-11