

Improvement of RD31 rice seed germination using DBD plasma treatment

Thursday, 21 May 2015 14:45 (15 minutes)

Effects of atmospheric plasma treatment on RD31 rice seed germination are studied. The seeds are treated with 5 mW of plasma for 10 sec. It is found that plasma treatments have positive effects on seed germination and seedling growth at the early stage. The germination rate is found to improve by 25% compared to non-treated seeds. In addition, the better quality of sprouts is obtained. It is found that after 15 days, the roots' length and weight of treated seeds is increased by 10% and 20%, respectively, compared to non-treated seeds. In addition, the trunks' length and weight are increased by 15% and 20%, respectively.

Summary

Primary author: Ms TRAIKOOL, Tipwimol (Thammasat University)

Co-authors: Dr FUANGFUNG, Manu (Thammasat University); Dr POOLYARAT, Nopporn (Thammasat University); Dr AMNUAYSIN, Nuankamol (Thammasat University); Dr CHITTAPUN, Supenya (Thammasat University); Prof. ONJUN, Thawatchai (Sirindhorn International Institute of Technology)

Presenter: Ms TRAIKOOL, Tipwimol (Thammasat University)

Session Classification: Ion and Plasma Physics

Track Classification: Ion and Plasma Physics