岩手大学農学部附属寒冷バイオフロンティア研究センター主催

84th CRC Seminar

今回は、プロテオーム解析で寒バイに滞在するフィリピン・国際稲研究所(IRRI)のReneeliza Jean Melgar 氏に高温ストレスに対するイネの生理学的・分子生物学的応答についてお話ししていただきます。地球レベルでの気候変動、特に、気温上昇が及ぼすイネの生育、発生、籾の品質などについて話題提供していただきます。ご興味のある多くの皆様の参加をお待ちしています。

Ms. Reneeliza Jean Melgar

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Physiological and Molecular Responses of Rice to Heat Stress

時間:2013 年 7 月 23 日(火)16:30~18:00 場所:総合教育研究棟(生命系)1 階 遠隔講義室

Rice is a global cereal grown without geographic boundaries spanning a wide range of diverse environments. Increased frequency of heat stress events over the past three decades has been mapped across major rice-growing regions across the world. Further, with the projected increase in global average surface temperature by 2.0 to 4.5°C and increased variability across the mean, presents a stiff challenge for sustaining global rice yield and quality. Heat exposure during crucial developmental stages like anthesis can either reduce spikelet fertility or lead to complete spikelet sterility, and translate into poor grain filling and milling quality outcomes. Addressing the physiological and molecular mechanisms inducing heat tolerance during these sensitive stages will help adapt rice cultivation to a future warmer world. In this presentation, the research progress of our team focusing on the molecular and physiological aspects of heat stress response to both high day and night stress will be presented. In addition, the need to consider heat and drought interactions will be highlighted.