

SOME PHYSIOLOGICAL ASPECTS OF BRONZING DISEASE IN RICE

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Bronzing is a physiological disease caused by Fe^{++} ion toxicity and anaerobic conditions in the soil. This disease can be induced in liquid culture grown plants using extra Fe^{++} and low pHs in the culture medium. Disease resistant and disease susceptible varieties could be easily distinguished using 425ppm Fe^{++} at pH5.0. The varieties H-9, Bg 11-11, Bg 90-2, Ld 125 and IR-8 are susceptible to the disease and the varieties H-4, Kuantik Putih, IR2061-464-2-4-4-6, IR 2070-189-4-1-3, Mashuri are resistant. Experiments using varying levels of H_2S and Fe^{++} in the medium showed that H_2S can enhance the rate of Bronzing development in susceptible varieties.

This work is supported by National Science Council Grant No: 2/RG/76/3