Effects of Waterlogging on Growth and Physiology of Hopea odorata Roxb

ABSTRACT

This study examines the growth and physiological characteristics of Hopea odorata growing under waterlogging condition. H. odorata was selected as it is widely planted as urban landscape tree species which experienced some growth stresses. Two waterlogging treatments and a control were designed. Forty 5-year old saplings each were subjected to waterlogged condition for 30 days which were then allowed to recover for a further 30 days as Treatment 1 (T1) and waterlogged condition for 60 days as Treatment 2 (T2). Aboveground and belowground biomass including leaf area was determined before and at 30 and 60 days of study. The net photosynthesis (Anet), stomatal conductance (Gs), transpiration rate per unit leaf area (EL) and leaf to air vapour pressure deficit (}

Keyword: Waterlogging, Hopea odorata, Gas exchange, Growth, Physiology