

Research Title : Effects of Waterlogging on Growth and Yield of Medical Plant *Houttuynia cordata* Thunb

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ABSTRACT

The objective of this study was evaluated of waterlogging duration and waterlogging at different growth stages on growth and yield of Chinese lizard tail. A glasshouse experiment was conducted at the Faculty of Agricultural Technology, King Mongkut's Institute of Technology Ladkrabang, during November, 2014 to April, 2015. The experiment was a 3x4 factorial in a completely randomized design with three replications. The two factors were waterlogging at different growth stage treatments (waterlogging at 30, 60 and 90 days after planting (DAP)) and waterlogging duration treatments (waterlogging for 1, 5, 7 and 15 days). The results disclosed that waterlogging at different growth stages significantly affected the leaf, stem and total dry weight yield. Waterlogging at the earliest growth stage (30 DAP) resulted in the greatest reduction in leaf and stem dry weight and total dry weight yield. There were decreased in transpiration rate, stomata conductance and leaf water content due to flooding. For waterlogging duration, the increasing of waterlogging duration resulted in the inhibition of Chinese lizard tail growth. The lowest growth and yield were recorded in the treatment waterlogging for 15 days whereas the highest was in the waterlogging for 1 day.

Keywords : Waterlogging, Growth, Yield, Chinese lizard tail.