

Academic Researches

This section aims at giving credit to student researchers and encouraging more local scientific studies in the areas of Arboriculture and Urban Forestry. Publicizing the results does not imply that ISAHK has reviewed the full data or accuracy of the contents, nor has it endorsed the conclusion of the studies or their parts.

STUDENT CORNER

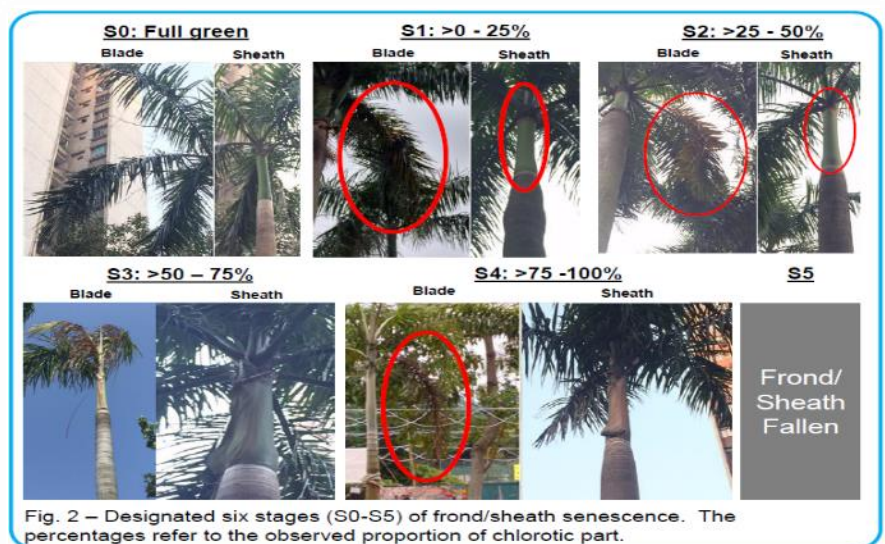
1. Study of Senescence and Falling of *Roystonea regia* Fronds with Respect to Risk Management

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There were accidents of fallen palm fronds (weight of up to 5.06kg) of *Roystonea regia* (王棕) which caused injuries in various extent. For fear of such accident happened again, some management teams then decided to prune the fronds regularly but sometimes over-pruning which affects the tree growth and health may be resulted. The study investigated the time required for frond falling from the onset of senescence (sample size: 180 trees from different LCSD sites). Time required for a frond, and sheath remained after pruning to fall was studied. Relationship of frond falling time with palm height, trunk diameter was also compared. Scale of frond chlorosis (S0 to S5, indicating different stages of chlorosis) was established to record the stages of senescence.

The survey reveals that it takes approximately 40 days for fronds of *R. regia* to be shed (to be pruned in recent practice) after the onset of chlorosis (S1). Without human interference, whole frond would fall within 14 days upon discovery of S4, so removal of this kind of fronds should be implemented timely. Regardless of the stage of chlorosis at the beginning, removal of blade through pruning would trigger the shedding of the remaining sheath to within 29-42 days. So removing blade too early would likely trigger early shedding of the remaining sheath.

*The study was published as poster presentation in the 2nd Asia Pacific Urban Forestry Meeting, organized by the Food and Agriculture Organization, United Nation (September 2017, Seoul)



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