*In vitro* Evaluation of Selected Fungicides against *Pestalotiopsis* spp, and *Lasiodiplodia theobromae* associated withRecently Recorded Two Diseases of Fishtail Palm (*Caryota Urens*)

Fishtail palm (*Caryota urens* L.) has been infected with two different previously unknown
diseases in Sabaragamuwa, Western, and Southern provinces in Sri Lanka, causing significant
crop loss. Therefore, the control of those two newly reported diseases has become utmost
important. The study was an attempt to evaluate the efficacy of different fungicides against *Pestalotiopsis* spp, and *Lasiodiplodia theobromae* associated with s of newly recorded two diseases of fishtail palm under *in-vitro*
conditions. Four types of fungicides (Carbendazim, Thiophanate methyl + Thiram (Homai), Chlorothalonil, and Mancozeb)
were used to evaluate the growth inhibition of causal pathogens at their recommended
concentrations (700 ppm, 1000 ppm, 3000 ppm, and 2000 ppm respectively). Initial screening was conducted
to evaluate the most effective fungicide for *Pestalotiopsis* spp, and *Lasiodiplodia theobromae*
pathogens *in vitro* using Disk Diffusion Method. Disease severity index was calculated for leaf spot
and leaf blight symptoms separately in filed conditions. According to the results, Carbendazim
(85 %) and Homai (85 %) showed higher inhibition against *Pestalotiopsis* spp in the initial
screening test and Fungicidal test. Fungicides, Mancozeb (91.71%) and Carbendazim (85.71%)
showed higher inhibition against *L. theobromae* in the initial Screen test after two weeks.
Mancozeb (90%), Chlorothalonil (89.79%) and Homai (90%) showed considerable inhibition of *L.
theobromae* after six days in fungicidal test. But Carbendazim showed less growth
inhibition (89.43%) than the other fungicides. After 21 days of inoculation, the range of Disease Severity Index in Pestalotiopsis spp was 4 – 90 % and in L. theobromae was 6 – 85 %.
According to the results, fungicides; Carbendazim and Homai showed satisfactory growth inhibition
against *Pestalotiopsis* spp while all of four fungicides tested showed growth inhibition against *L.
theobromaea* under in *in-vitro* conditions. Further
study is required to evaluate the most effective fungicides and their concentrations against
these pathogen/s under in *in-vivo* conditions.