THE PHENOLOGY OF *Rhodomyrius iomaniosa* IN MERANG

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1100024410 The Phenology of Rhodomyrtus tomentosa in Merang / Ang Hor Kheng.

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PROJECT REPORT CERTIFICATION AND PASS

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With this I verify that I have examined this project report and

- i. All corrections suggested by examiners have been done.
 ii. This report follows the format given in BIO 4999 (Project) Biology
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I dedicate this thesis to my family, Mr. Gordon and Leon.

ABSTRACT

Field observations were conducted on *Rhodomyrtus tomentosa* between 4th June to the 24th December 1999 to determine the phenology of several selected specimens of this plant at different sites in Merang, Kuala Terengganu. During this period, *Rhodomyrtus tomentosa* showed similarity in phenological behaviour at all study sites. By the time this study was initiated, the shrub was already well into the budding stage, therefore, its initial budding period date could not be determined while the second budding period started in October. There were two flowering periods as well; one starting in June while the other in November. The fruiting period began in June, ending in September. The peak flowering months were July and November while the peak fruiting period fell on September. Analysis on the bud to fruit developmental morphology was also conducted and revealed nothing out of the ordinary. Meanwhile, field investigation showed that the most frequent visitors and the most likely pollinating agent of *Rhodomyrtus tomentosa* were bees. Other organisms that visited the plant include wasps, birds, and ants but their contribution to the propagation of this plant is questionable.

ABSTRAK

Kajian terhadap Rhodomyrtus tomentosa dijalankan antara 4 Jun hingga 24 December 1999 untuk menentukan fenologi beberapa spesimen terpilih di beberapa lokasi berbeza di Merang, Kuala Terengganu. Sepanjang kajian ini dijalankan, Rhodomyrtus tomentosa memperlihatkan kesamaan dalam kalakuan fenologi di semua lokasi kajian. Pada masa pemerhatian dimulakan, tumbuhan ini telah mula berkudup atau berkuntum, maka, tarikh tempoh perkuntuman awal tidak dapat ditentukan manakala, perkuntuman kedua bermula pada Oktober. Terdapat dua tempoh pembungaan; satu bermula pada Jun manakala yang kedua bermula pada November. Tempoh pembuahan bermula pada Jun, dan berakhir pada September. Tempoh pembungaan puncak berlaku pada bulan Julai dan November manakala tempoh pembuahan puncak adalah pada September. Analisis terhadap perkembangan morfologi dari kuntum ke buah juga dilakukan dan tidak mununjukkan sebarang keanehan. Penyiasatan lokasi menunjukkan bahawa pelawat utama dan agen pendebungaan yang paling mungkin bagi Rhodomyrtus tomentosa merupakan lebah. Organisma-organisma lain yang melawati tumbuhan ini termasuk tebuan, burung dan semut namun, sumbangan mereka terhadap penyebaran tumbuhan ini tidak dapat dipastikan dengan tepat.