

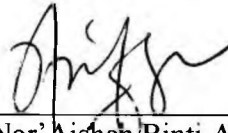
**RESPOND OF SEED CULTURE OF *Ricinus communis* TOWARD
DIFFERENT HORMONE TREATMENT *IN VITRO***

MUHAMAD SAIFULNIZAM BIN TAHIRUDIN

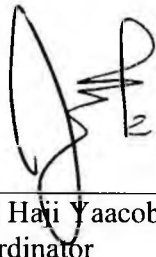
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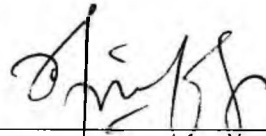
This Final Year Project Report entitled “Respond of Seed Culture of Ricinus Communis toward Different Hormone Treatment in vitro” was submitted by Muhamad Saifulnizam Bin Tahirudin in partial fulfilment of the requirements for the Degree of Science (Hons.) Biology, in the Faculty of Applied Sciences, and was approved by



Dr. Nor' Aishah Binti Abu Shah
Supervisor
B. Sc. (Hons.) Biology
Faculty of Applied Sciences
Universiti Teknologi MARA
72000 Kuala Pilah Negeri Sembilan



Ilyanie binti Haji Yaacob
Project Coordinator
B. Sc. (Hons.) Biology
Faculty of Applied Sciences
Universiti Teknologi MARA
72000 Kuala Pilah Negeri Sembilan



Dr. Nor' Aishah Binti Abu Shah
Head of Programme
B. Sc. (Hons.) Biology
Faculty of Applied Sciences
Universiti Teknologi MARA
72000 Kuala Pilah Negeri Sembilan

Date: _____

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ABSTRACT

RESPOND OF SEED CULTURE OF *Ricinus communis* TOWARD DIFFERENT HORMONE TREATMENT *IN VITRO*

This research work aimed to highlight on the effect of various plant growth regulators namely 1-Naphthaleneacetic Acid (NAA) and 6-Benzylaminopurine (BAP) on inducing response toward *Ricinus communis in vitro* tissue culture. The response observe may be shoot formation, root formation or callus formation that were initiated from seed explant of wild *Ricinus communis* plant located around Parit Tinggi, Kuala Pilah. Different combinations of hormone treatment were added into MS medium containing sucrose, macronutrient and micronutrient. Combination of auxin, NAA and cytokinin, BAP gave different response toward the seed explant. After two weeks of inoculation in sterile environment, the response was observed from the seed explant. About 25% of the incubated seed germinated in the MS basal medium. As a result, 0.5, 1.5 and 2.0 mg/l of NAA combined with 2.5mg/l BAP gave response where callus formation can be observed in this hormone treatment. Shoot formation was observed at 1.5 mg/l NAA and 2.5 BAP and at 1.0, 1.5, 2.0 and 2.5 mg/l NAA combined with 2.0 mg/l BAP, there was an enlargement of seed explant where the seed enlarged from average of 0.5 cm to 2 cm. In conclusion, different combination of auxin and cytokinin give rise to different response toward the seed explant of *Ricinus communis*.