



**UNIVERSITI PUTRA MALAYSIA**

***CLASSIFICATION OF SYAMILLE'S RAW STINGLESS BEE HONEYS BY  
BEE SPECIES ORIGIN USING NMR AND LC-MS-BASED  
METABOLOMICS APPROACHES AND THEIR NITRIC OXIDE  
ACTIVITIES***

**MUHAMMAD TAUFIQ ATSIFA RAZALI**

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**MUHAMMAD TAUFIQ ATSIFA RAZALI**

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