

**UNIVERSITI TEKNOLOGI MARA**

**SPATIAL CHARACTERISTICS OF HARUM MANIS  
PLANTATION IN BESERI, PERLIS USING  
REMOTE SENSING AND GIS**

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Thesis submitted in fulfilment  
of the requirements for the degree of  
**Bachelor in Surveying Science and Geomatics (Hons.)**

**Faculty of Architecture, Planning and Surveying**

**July 2019**

## **AUTHOR’S DECLARATION**

I declare that the work in this thesis/dissertation was carried out in accordance with regulation of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

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## **ABSTRACT**

Perlis is one of the agricultural states in Malaysia as it is known as the country of rice cultivation, Perlis is also a state with has valuable agricultural produce known as Harum Manis. This Harum Manis fruits has many advantage to the society in Perlis especially when fruits season. The aim of this study is to analyse the spatial characteristics of Harum Manis (*Mangifera Indica*) plantation in Beseri, Perlis using Geographical Information System (GIS) and Remote Sensing. Performed the Supervised classification is use to know area that has plantation in Beseri Perlis. Other than that, analyser also collect the spatial characteristics of Harum Manis such as LST, Bare Soil, Rainfall, NDWI and SRTM to know the best place to make Harum Manis plantation in Beseri, Perlis. The result is Map of LST, Bare Soil, Rainfall, NDWI, and SRTM in Beseri Perlis. Other than that, there is also has map the best place to plant Harum Manis and using the multi parameter reserch compare to yield production of Harum Manis in Beseri, Perlis.

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