CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

Kompleks Sawit Sri Meranti is an oil palm plantation located at 3°37'19.1"N 103°08'14.1"E is established from 1995 that cover an area of 21 hectares in Lepar, Kuantan. The increase in plantation area along with the production of fresh fruit bunch (FFB) causes the existing palm oil mill to overflow and cannot cater the number of FFB. In the year of 2000, a new oil plant mill is built in the massive plantation farm. The mill is able to process as much as 40-80 tons of fresh fruit bunch per hour. When the oil plant mill began to operate, the number of lorry that enter the plantation area increase causing the unpaved road in the plantation area to be damaged especially during the rainy seasons. To overcome the problem, the road is repaired by using chemical that is bi-sulphate. The existing road is still in good condition after a lifespan of 15 years. The road is still damaged because the effect of the chemical will fade but the road is regularly maintained.

The road at Kompleks Lepar Sri Meranti is easily repaired without using the hot mix asphalt. The repair process involved is started by loosening and level the soil. Then, the soil is sprayed with bi-sulphates and water. Next, mixing and cambering process take place. Lastly, the soil is compacted before the road is ready to be used.
There are several laboratory testing that is about to be conducted in this study. Further explanation about the test such as procedure will be elaborate. The activities done will be shown using flow chart and will explain about the methodology of this study on Figure 3.1.

The laboratory test that will be carried out will follow the British Standard Code 1377:1990.
Figure 3.1: Flow of activities of research