TITLE: EXTRACTION AND ANALYSIS OF ACTIVE INGREDIENTS FOR FUNGAL INHIBITION IN THE LEAVES OF *Senna didymobotrya*

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TRADE PROJECT

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ABSTRACT

An Isolated fungus (Epicoccus Kaptagat) was used to investigate the effect of Senna didymobotrya on growth of fungi. The extract fractions obtained were mixed with petroleum ether and acetone in the ratio of 3:1. This was introduced into the media (Mixture of agar and malt - ratio 1:1 m/m) which was to be cultured together with fungus.

Senna didymobotrya extract was separated into ten fractions by thin layer chromatography. These fractions showed inhibiting properties towards fungal growth and hence no more growth for some after five weeks as shown below.

Fraction	growth (cm) from the centre
1	3.05
5	3.90
7	3.80
10	2.30

Other fractions had overgrown showing that their inhibiting properties were not strong enough to overcome the growth. The only fraction that stopped this fungus from further growth was the tenth one. The fraction gave maximum inhibition in the first week (seventh fraction) if combined with the one that showed same properties in the second week (tenth fraction), maximum inhibition will be achieved as from beginning to the end. The thin layer chromatograms show that fractions with highest inhibition had a yellow colouration. This may be further studied to get the compound (yellow

compound on the chromatograms) and see whether it can completely stop fungal growth on its own.