## CONCLUSION

In conclusion, the crude alkaloid fraction of *Eurycoma longifolia* root was found to significantly increase the release of dopamine from rat brain synaptosomes, but had no significant effect on the uptake of dopamine. A reversed phase HPLC method utilizing an acetonitrile: water gradient was developed which successfully separated the crude alkaloid fraction into five major fractions, designated Fraction 1, 2, 3, 4 and 5. Fraction 2 was revealed by thin-layer chromatography (TLC) on silica gel (chloroform: methanol, 95:5 v/v, as the solvent system) to consist of two components. Fraction 2 and Fraction 4 were found to significantly increase the release of dopamine from rat brain synaptosomes and are believed to be responsible for the same action observed with the crude alkaloid fraction.