

CHAPTER 6

Bioautography

6.1. Introduction

Bioautography is probably the most important detection method for new or unidentified antimicrobial compounds and has found widespread application in the search for new antimicrobials. It is based on the biological (antibacterial, antifungal, etc.) effects of the substances under study. This assay had the advantage of being quick, easy to perform, relatively cheap, requiring no sophisticated infrastructure, only requiring micrograms of test compound and results are easy to interpret. In this study TLC separation of the crude plant extracts in combination with bioautography was used as a bioassay-guided isolation method in order to screen for and identify compounds with fungal activity within the tested samples.

The diversity of antifungal compounds of six *Terminalia* species determined by bioautography was presented by published article (Masoko and Eloff, 2005). The results of the *Combretum* species were submitted for publication and the paper is in press: Bioautography indicates the multiplicity of antifungal compounds from twenty-four South African *Combretum* species (Combretaceae) (Masoko and Eloff, 2006).