

Microbial natural products are those secondary metabolites produced by the microorganisms and have biological activity. Historically many pharmacologically acting drugs were produced by microorganisms. Many antibacterial agents, antifungal agents, anticancer agents, antiviral agents and some cholesterol lowering agents are examples for drugs or prodrugs originated from microbial source. However, many synthetic drugs may be prepared cheaply; emergence of microbial resistance to most synthetic agents redirected the research towards screening of new antimicrobials produced from microorganisms. Many tools are used nowadays to elucidate if the antimicrobial agents recovered from microorganisms are new or previously discovered. These tools are either instrumental analysis tools or genetic tools. Microorganisms producing secondary metabolites with antimicrobial activity may be recovered from clinical, food or environmental samples. As a result of the importance of the discovery of new antimicrobial agents, we decided to make a research in this field. The main aim of our study is the discovery of new antimicrobial agents recovered from microbial source. The expectation of discovery of new antimicrobial agents from microbial isolates recovered from Egypt is somewhat high as not many researches regarding this field were done in Egypt and Egypt has its microbial wealth. As the microbial resistance is a common problem in Egypt, this research estimated results may be very beneficial in solving this problem.