CHAPTER 2

Bioactive compounds and therapeutic values of some latex yielding plant

Ananya Mishra, Sagarika Parida*

Department of Botany, School of Applied Sciences, Centurion University of Technology and Management, Odisha, India

*Email-Id: <u>sagarika.parida@cutm.ac.in</u>

ABSTRACT

Plant latex is produced by a number of plants belonging to different families. They are known to have various properties viz. ethno-medicinal uses, antimicrobial, anti-analgesic, wound healing and also used in preparation of other necessary products like rubber, chewing gum, footwear, motor vehicle and machinery accessories etc. Among various phytochemicals, plant latex is a rich source of important bioactive compounds which show diverse biological activities against pathogenic bacteria, fungi, viruses, protozoa, nematodes and insects. It is reported to contain glycosides, tannins, flavonoids, phytosterols, acetogenins, and saponins of pharmaceuticals importance. In present study, data is accumulated for the chemical constituents and traditional medicinal uses of 10 latex producing plants. This paper could be a valuable source for the researchers to use plant latex as a valuable resource to develop novel drugs against diverse diseases and other useful products based on the phytochemical constituents and traditional uses.

Keywords: Antimicrobial activity, ethnomedicinal uses, latex, novel drugs, valuable resource

2.1 INTRODUCTION

Latex from plants is a very good source of drug, pesticide and other industrial based products like rubbers, types of motor vehicle etc. Latex is produced by 20,000 species belonging to 40 families including both monocots and dicotyledons (Ranasinghe *et al.* 2019). Latex is produced by 10% of all flowering plants as a plant defense activity around the globe (Prakash *et al.* 2009). In this study the latex plant species are identified for their composition and medicinal uses. Latex plant species is a rich source of important bioactive compounds showing biological activities against bacteria, fungi, viruses, protozoa, nematodes and insects. It contains glycosides, tannins, phytosterols, flavonoids, acetogenins and saponins of pharmaceuticals importance. It is used