

Habitat-specific microbial community associated with the biodiversity hotspot

Sarita Tiwari¹, Sandhya Moghe¹, W.B. Gurnule²,
Devidas S. Bhagat³ and Aparna Gunjal⁴

¹Department of Biotechnology, Kamla Nehru Mahavidyalaya, India,

²Department of Chemistry, Kamla Nehru Mahavidyalaya, India,

³Department of Forensic Chemistry and Toxicology, Government Institute of Forensic Science, Aurangabad, India, ⁴Department of Microbiology, Dr. D. Y. Patil Arts, Commerce & Science College, Pune, India

2.1 Introduction

India is ranked as a mega-diverse country enduring four biodiversity hotspots among the 36 proclaimed sites situated worldwide (De Mandal et al., 2015; Rajkhowa et al., 2015). The four regions are the Himalayas, the Indo-Burma region, Western Ghats, and the Sundaland. The arena tagged as hotspots are known for their rich and discrete biological combo witnessing biological activity par the normal limit but having fear of extinction is marked as biodiversity hotspots. The overall survey in India reports the existence of over 91,000 species of animals, and 45,500 plant species have been documented in India. The major factors responsible for creating a diverse aura are climate, temperature, soil quality, rainfall percentage, and the presence of many rivers culpable for vegetation cover and microbes dwelling in soil (Rathour et al., 2017).

The soil in the biodiversity zone is laced with a unique natural environment in which inhabitant special microbes with distinctive charac-