**Rhamnolipids**

They are the glycolipids produced by *Pseudomonas aeruginosa* and composed of Mono- or Di- rhamnose units which are further linked to one or two alkyl fatty acid chains. Mostly they are synthesized in the form of mono-rhamnolipids and di-rhamnolipids mixture. They are the biosurfactants with very efficient properties useful in the processing sectors such as, enhanced surface-activity, low toxicity, emulsification and biodegradability. Moreover, it possesses antimicrobial activity against numerous microbes including gram-positive bacteria, *Bacillus subtilis, Listeria monocytogenes*, *Clostridium perfringens* and *Staphylococcus aureus* the gram-negative bacteria *Escherichia coli*, *Salmonella typhimurium* and *Enterobacter aerogens,* and fungi*, Botrytis cinerea, Phytophthora capsica, Fusarium graminearum, Mucor* and *Phytophthora infestans.* The action mechanism of antimicrobial potential of rhamnolipids is not completely known, yet, it is hypothesized that their target site of action is cell membrane, being amphipathic in nature which facilitates its binding with the membrane phospholipids.

Furthermore, a study demonstrated that microbial spoilage of food can be inhibited by the rhamnolipid-based coating. In the study, they investigated three different biosurfactants, among which, only rhamnolipid showed significant antimicrobial activity against test fungal strains, *F. solani, A. oryzae,* and *Curvularia sp.* Moreover, coating of rhamnolipid on tomato, potato and lemon shielded them from spoilage by fungus up to 2 weeks at 25⁰C.