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ANTIBACTERIAL EFFECT OF ARBUTUS UNEDO L. FRUIT AND ITS

ESSENTIAL OILS ON SALMONELLA TYPHI (ATCC 14028) AND

PSEUDOMONAS AERUGINOSA (ATCC 27853)

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ABSTRACT

In the recent years, there is considerable use of plants, especially fruits. These fruits are attracting more and more interest growing among both consumers than among dietiticians and nutritionists. They are important for human health because of richness in vitamin C, antioxidants (polyphenols), minerals and enzymes that fight against certain diseases.

Our choice is focused on the study of *Arbutus unedo L*, which is a wild fruit which is located in the north of Africa mainly in Algeria, and characterized by its very higher nutritional value and antioxidant and antimicrobial properties.

The objective of our research is to study the antibacterial effect of this fruit and its essential oils on selected bacterial pathogens; *Salmonella typhi* (ATCC 14028) and *Pseudomonas aeruginosa* (ATCC 27853).

The obtained results show that *Arbutus unedo* L. fruit and its essential oils have no inhibitory effect on the selected bacteria. This resistance is due to the composition of the cell wall of Gram-negative bacteria, which is rich in lipopolysaccharides.

KEYWORDS: Arbutus unedo L., Essential Oils, Antibacterial Effect, Gram Negative