

Antimicrobial Potential of Calendula officinalis Extracts on Flavobacterium columnare of Clarias gariepinus Fingerlings

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Abstract : Ninety Fingerlings of *Clarias gariepinus* were exposed to the pathogenic *Flavobacterium columnare* a Gram Negative bacteria responsible for high mortality in fish pond raised young fish (fries and fingerlings) of *Clarias* sp. in Southwestern Nigeria. After feeding with 40% crude protein pelletized fish feed for 5 days, the fishes were divided into two groups, one group was treated with extracts from *Calendula officinalis* flowers, while the second group was not treated (control). The results indicated that, at day 5, colony formation had been manifesting and at day 7, skin lesion occurred and at the 8th day, first mortality of fish occurred, and this continued steadily on the 9th-12th day when all the fishes were dead. Whereas, in the group that was treated with *Calendula* sp., no single mortality was recorded. This research shows that plant extract from *Calendula* flowers is an effective antimicrobial agent against the virulent pathogenic *Flavobacterium columnare* disease.

Keywords : antimicrobial, *Flavobacterium columnare*, *Clarias gariepinus*, fish

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