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Characterization of Fraction of *Carica papaya* L. Leaves Ethyl Acetate Extract to African Catfish *Clarias gariepinus* Leucocytes Using UV-Vis, FTIR and GC-MS Methods

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Abstract : The active component in the leaves of *C. papaya* L. such as alkaloids including carpain and pseudocarpain, enzyme (papain, chymopapain, cystatin), tocopherol, amino acids, flavonoids, tannins, nicotine acid, saponins and other phenolic compounds, has the effect of immunomodulatory. Blood cells, especially leukocytes, present important phagocytic function on the immune system regulation. The aim of this study to determine the characterization of a fraction of *Carica papaya* L. leaves ethyl acetate extract to African catfish (*C. gariepinus*) leucocytes using UV-Vis, FTIR and GC-MS methods. Our analytical attention was focused on secondary metabolites which never been reported in the literature. *C. papaya* L. leaves fraction 9 contains active compounds hexanedioic acid, bis(2-ethylhexil) ester and hexanedioic acid, dioctyl ester that are triterpenoid derivatives, were assumed increasing leucocytes number of African catfish. Besides, it has beneficial effects on fish health and enhance the immune system (leucocytes number) and hence they could play an important role in preventing disease outbreaks in aquaculture systems.
Keywords: characterization, fraction of *Carica papaya* L., leucocyte.

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