Methanolic Extract of Croton Penduliflurus Affects Intestinal Enzyme Activity and Protein Content in the Late Phase of Pregnancy

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Herbal plants are gaining popularity due to their minimum side effects against some chronic diseases (Karim et al., 2011). So, the governments, scientific and medical communities now are taking a core interest to explore more hidden potential of the herbal plants. Croton penduliflurus belongs to Euphorbiaceae family and its seeds are commonly used as a purging nut and possess inflammatory, vesicant and contraceptive properties in Nigeria (Bablola, 2009). It is particularly used for the treatment of the stomach complaints (Adesogan, 1981). Its oil is used for the as liniment for acute rheumatism arthritis, neuralgia and diseases of the joints (Gills, 1992). Its chronic aspect has been observed while it is used during the pregnancy especially in the late phase (Asuzu et al., 1990). This plant has ability to impose some changes in stomach, duodenum, ileum and colon (Asuzu et al., 1989). During the pregnancy an increase has been observed in the intestinal enzymes and in both pregnant and non-pregnant rats, diabetes was associated with marked increase in three mucosal disaccharidases (Younoszai and Ranshaw, 1976). Croton seeds and oil have been used in the treatment of a wide range of disorders in pregnant and non pregnant individual but its effect on the gastrointestinal tract yet not been documented with pregnancy.

A research has been conducted to observe the effect of methanolic seed extract of C. penduliflurus on intestinal tract enzymes and total protein contents in pregnant rats. The research was appeared in the Research Journal of Medicinal Plant 3 (4): 141-145, 2009. Researchers found that the extract cause increase in the maltase activity, total protein concentration, albumin concentration and sucrase activity during the different phases of pregnancy. Increased in border enzymes especially sucrase exhibited hyperplastic (growth) effect on the small intestinal enzyme activities. So, they concluded that MECP (methanolic extract of Croton penduliflurus) have ability to increase intestinal enzyme activity in pregnant rats and affects the protein content significantly in the late phase of pregnancy (Oyesola et al., 2009).

REFERENCES