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***In vitro* Anticoagulant Activity of Methanolic Extract of *Ficus hispida* (Hairy Fig) Bark**

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Background: *Ficus hispida* L. f. (Hairy Fig), is a widely used herb in traditional medicine in Sri Lanka and is reported to have antimicrobial, antioxidant, antinociceptive, antineoplastic, and anti-diabetic activities. However, its potential anticoagulant effect on human blood is yet to be revealed, highlighting the importance of understanding its impact on blood clotting mechanisms.

Objective: To evaluate the *in vitro* anticoagulant activity of methanolic extract of *Ficus hispida* bark

Methods: The fresh, healthy bark of *F. hispida* was collected and rinsed with tap water. The cleaned bark was dried in an oven at 40°C and finely ground into powder using an electric grinder. The methanol extract of *F. hispida* was obtained by combining 40 g of dry powder with 250 mL methanol (solute to solvent ratio of 1:6.25) at 55°C for 3 hours using a Soxhlet apparatus. Then the extract was evaporated by a rotary evaporator and redissolved in 2.4 mg/mL of Tris buffer at pH 7.4. Venous blood samples were collected from six healthy volunteers in sodium-citrate tubes and subjected to plasma separation by centrifugation at 3000 rpm for 15 minutes. The anticoagulant efficacy of extracted plant material was evaluated by prothrombin time measurement. Data were analysed by one-way ANOVA using SPSS version 18.0.

Results: The extraction yield of methanolic extract of *F. hispida* bark was 15%. The methanolic extract showed an anticoagulant potential on pooled human plasma by elevating the prothrombin time in a concentration-dependent manner by 3.00, 12.07, 22.67, and 64.20 sec at a concentration of 156.25, 312.5, 625 and 1250 µg/mL, respectively. Furthermore, statistical analysis indicated that methanol extract of *F. hispida* bark has a significant ($p=0.001$) anticoagulant effect on human plasma at a concentration above 312.5 µg/mL compared to negative control prothrombin time of 15.8 sec.

Conclusions: Methanolic extract of *F. hispida* bark showed an anticoagulant effect on pooled human plasma in a concentration-dependent manner; further studies on compound purification and characterization are recommended to find the active anticoagulant compound.

Keywords: Anticoagulant activity, Bark, *Ficus hispida*, Methanol extract, Prothrombin time test