Analgesic and antimicrobial activities of methanol extract of *Colocasia lihengiae* leaves

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*Colocasia lihengiae*, a plant belonging to the family of Araceae is a well-known traditional medicinal plant used in Bangladesh. The aim of present study was to evaluate the antibacterial activity (by using disc diffusion method on different Gram positive and Gram negative bacteria) and analgesic (by acetic acid induced writhing test and formalin induced licking test) activities by using Swiss albino mice as a test animal. The extract showed zone of inhibition 8 mm at 1000 μg/disc on *Staphylococcus aureus* as a Gram positive bacteria where standard kanamycin was 30 mm at same concentration and it also showed zone of inhibition 12 mm at 1000 μg/disc where standard kanamycin was 27 mm on *Colocasia lihengiae*. At a dose of 400 mg/kg body weight, the crude methanol extract produced inhibition of writhing 34.83% compared to the standard (Diclofenac sodium) 69.66%. The analgesic effect on formalin induced model, the % of the inhibition was 33.55% at 400 mg/kg where standard Diclofenac sodium was 68.22%. So it can be concluded that this extract is good candidate as a source of antibacterial agent as well as analgesic effect but this experiment was preliminary investigation, it is needed that more experiment in the field of phyto-medicine to confirm main compound which is responsible for activity.