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IMMUNOSTIMULANT ACTIVITY OF ETHANOLIC EXTRACT OF SARANG SEMUT TUBERS (*MYRMECODIA ARCHBOLDIANA* MERR. & L.M. PERRY) IN WHITE MALE RAT

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ABSTRACT

Ethanolic extract of Sarang Semut tubers *Myrmecodia pendens* and *Myrmecodia tuberosa* has been research as immunostimulant, but never been conducted for *Myrmecodia archboldiana* Merr. & L.M. Perry which is more popular. The aims of this study was to determine immunostimulatory effects of *Myrmecodia archboldiana*. This study used 25 *Sprague Dawley* male rats were divided into 5 groups. Group 1 as control administered by solution CMC 0,5%, group 2 as positive control administered levamisol hydrochloride 10 mg/200 g body weight, group 3, 4, and 5 were administered by ethanolic extract of *Myrmecodia archboldiana* at the level of 1962, 0,3924 and 0,7848 g/200 g respectively. They were administered orally for 14 days. On day 8th, every rat injected 5% sheep red blood cells (SRBC) by intraperitoneal. On the 15th day, each rat was given 5% SRBC by subplantar for delayed type hypersensitivity test and the number of leukocytes, lymphocytes, granulocytes, and spleen weight was calculated using blood cell analyzer. Ethanolic extract of *Myrmecodia archboldiana* at dose 0,1962 gram/200 g body weight has immunostimulant activity by increasing paw volume at 2nd hour after injection equivalent with levamisole hydrochloride on delayed type hypersensitivity test, but did not increase the number of leukocytes, lymphocytes, granulocytes and spleen weight.