

Title (4)	: The effect of Zn-Rich Sambiloto (<i>Andrographis paniculata</i>) Simplicia Powder Diet to SGOT, SGPT and SOD of Stapylococcus aureus induced Wistar
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Abstract	: One source of natural antioxidants considered safer is the bitter plant, which contains many phenolics and flavonoids and high levels of chlorophyll, so it has the potential to act as an immunomodulator. However, the drying process of bitter leaves can reduce chlorophyll levels. This study aims to evaluate the effect of metallochlorophyll formation on the chemical properties of bitter powder, antioxidant activity, and the immunomodulatory effects of Zn-rich bitter powder in vivo. The materials of this study were bitter powder (SP) and SP powder with metallochlorophyll treatment (SZP). Twenty five male Wistar rats were divided into five groups: G1: normal, G2: negative control, G3: commercial immune-boosting supplement intake (SC), G4: SP intake, and G5: SZP intake. Group G1-5 was fed a standard feed of 20 g/day, and group G2-5 was injected with <i>Staphylococcus aureus</i> at a dose of 0.1 ml/head (108 CFU) intraperitoneally. The results showed that forming metallochlorophyll complexes in sambiloto simplicia will increase total chlorophyll and Zn contents and its antioxidant activity compared to natural sambiloto simplicia powder. Intake of Zn-rich sambiloto simplicia powder was able to significantly reduce SGPT, SGOT levels, and increase SOD compared to intake of original sambiloto simplicia powder.