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## The Potential of Dewa Leaves (*Gynura pseudochina* (L) D.C) and Temu Ireng Rhizomes (*Curcuma aeruginosa* Roxb.) as Medicinal Herbs for Dengue Fever Treatment

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### Abstract

There are a lot of natural resources that potentially used as herbal medicines in Indonesia. Some of the herbs, like Dewa leaves (*Gynura pseudochina* (L) D.C) and temu ireng rhizome (*Curcuma aeruginosa* Roxb.), were usually used to increase number of thrombocytes in dengue patient. This current study was to determine the potential of dewa leaves (*Gynura pseudochina* (L) D.C) and temu ireng rhizome (*Curcuma aeruginosa* Roxb.) against the number of thrombocytes, erythrocytes, and hematocrits level on male white rats (*Rattus norvegicus*) by using Heparin Induction. Dosages of the extracts were 250 mg/kg BW and 500 mg/kg BW used for both dewa leaves and temu ireng rhizome. Extracts were given orally to the tested animals for seven continuous days. The number of thrombocytes, erythrocytes, and hematocrits level were examined at day 7 using Sysmex XE-5000 hematology analyzer. The result showed that the rat groups which were treated with dewa leaves extract at 500mg/kgBW; temu ireng Rhizomes extract at 250 mg/kgBW and 500 mg/kgBW dosages had significant differences ( $\alpha = 0.05$ ) on number of thrombocytes. The percentages of thrombocytes number enhancement for temu ireng rhizomes extract 500 mg/kgBW, temu ireng rhizomes extract 250 mg/kgBW, dewa leaves extract 500 mg/kgBW were 26.98%, 24.48%, 19.44% respectively. The rats group which were treated with temu ireng Rhizomes extract at 500 mg/kgBW, dewa leaves extract at 250 mg/kgBW and 500mg/kgBW had significant differences ( $\alpha = 0.05$ ) on erythrocytes number and hematocrits level enhancement. The percentages of erythrocytes number enhancement for dewa leaves extract at dose of 500 mg/kgBW and 250 mg/kgBW, temu ireng rhizomes extract 500 mg/kgBW were 9.59%, 9.11%, 9.02% respectively. The highest percentages of hematocrits level enhancement was given by dewa leaves extract at dose of 500 mg/kgBW (10.97%), suggesting that the extracts treatment would not trigger plasma leakage. Thus, dewa leaves extract at 500mg/kgBW; temu ireng rhizomes extract at 250 mg/kgBW and 500 mg/kgBW dosages are potential as candidates to be medicinal herbs to increase numbers of thrombocytes on dengue fever treatment

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