The Dual Actions of Paederia scandens Extract as a Hypouremic Agent: Xanthine Oxidase Inhibitory Activity and Uricosuric Effect

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The structures presented in Fig. 1 have to be corrected as shown here. These compounds were isolated and identified as reported before [1], [2], [3], [4], [5].

In the present paper it was concluded that oral administration of a P. scandens extract possessed hypouricemic effects. Nevertheless, considering the experimental set up, this wording could be misleading since the treatment already started before the disease was induced. Most species used for pharmacological experiments have rather low blood levels of uric acid. Experimental hyperuricamia can be induced by inhibition of the enzyme uricase. In most species uricase metabolizes uric acid to allantoin which easily can be excreted. Potassium oxonate blocks uricase and increases endogenously synthesized uric acid. This increase is blocked by compounds like allopurinol. Here animals were pretreated over a 14 days period with various doses of an extract prepared from the arial parts of P. scandens. On day 14 the animals received a single dose injection of the uricase inhibitor potassium oxonate. The results clearly showed that pretreatment of mice with a P. scandens extract could prevent an increase in uric acid levels. Thus, the extract seems to have beneficial effects in the prevention of gout attacks.

References

Fig. 1 Chemical structure of asperuliside (1), paeaderoside (2) and scandoside (3)