



*Original article*

## Secondary Metabolites of *Hypericum* L. Species as Xanthine Oxidase Inhibitors

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### SUMMARY

Nine *Hypericum* species (*H. barbatum*, *H. hirsutum*, *H. linarioides*, *H. olympicum*, *H. perforatum*, *H. rochelii*, *H. rumeliacum*, *H. tetrapterum* and *H. umbellatum*) collected in Serbia were assayed for inhibitory potential against xanthine oxidase *in vitro*, on the commercial enzyme, and compared with allopurinol. Seven studied *Hypericum* species (*H. barbatum*, *H. rochelii*, *H. rumeliacum*, *H. umbellatum*, *H. perforatum*, *H. tetrapterum* and *H. olympicum*) inhibit commercial xanthine oxidase with an  $IC_{50}$  below 100  $\mu\text{g/mL}$ . *H. barbatum* exerted the most potent inhibitory effect ( $IC_{50} = 31.84 \pm 6.64 \mu\text{g/mL}$ ), followed closely by *H. perforatum* ( $IC_{50} = 37.12 \pm 4.06 \mu\text{g/mL}$ ).

*Key words:* xanthine oxidase inhibition, *Hypericum*, secondary metabolites

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