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***Bryonia alba* L., a new approach to rheumatic diseases**

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*Bryonia alba* L. (Cucurbitaceae) has been used to treat rheumatic pain in Turkish folk medicine. According to phytochemical investigations, it has been found to have cucurbitacins and some flavone C-glycosides. Antioxidant, anti-inflammatory and anti-nociceptive activities of *B. alba* were investigated in this study. n-hexane, ethyl acetate and methanol extracts were prepared from *B. alba* roots, successively. For the evaluation of anti-inflammatory, anti-nociceptive activities of these extracts, carrageenan-induced hind paw edema, acetic acid-induced increased vascular permeability, p-benzoquinone induced writhing, tail flick tests were performed. DPPH, ABTS, non-site-specific hydroxyl radical scavenging activity and FRAP assays were used for the assessment of antioxidant activity for the extracts. According to the results, the ethyl acetate extract showed the potent anti-inflammatory activity on both anti-inflammatory mice models and also the same extract displayed statistically significant activity on p-benzoquinone induced writhing model. Furthermore, total phenolic and total flavonoid content assays were conducted on ethyl extract of *B. alba* roots which have the highest anti-inflammatory and anti-nociceptive activity among tested extracts. As a result, ethyl acetate extract of *B. alba* roots could be used for the treatment of inflammatory diseases.

**Biography**

Mert Ilhan has received his BS degree from Faculty of Pharmacy, Ankara University, Turkey and pursuing his PhD studies in the Department of Pharmacognosy, Faculty of Pharmacy, Gazi University with Professor Esra Akkol. He has 13 published articles in SCI indexed journals and 1 chapter in international book.

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