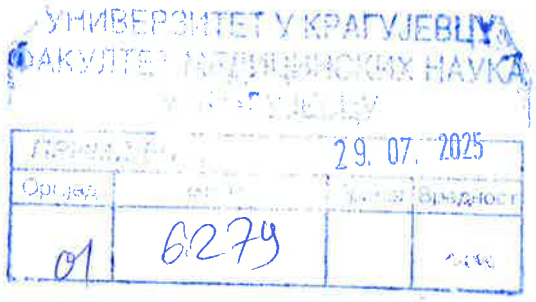
Универзитет у Крагујевцу

Факултет медицинских наука

Декану проф. др Владимиру Јањићу



ЗАХТЕВ ЗА ОДОБРЕЊЕ УЧЕШЋА НА НАУЧНОМ СКУПУ

Поштовани декане,

Обраћам Вам се са молбом да ми дате сагласност за мој боравак као истраживача на Конгресу (International Conference on Pharmacy, Categories of Drugs and Drug Action (ICPCDDA-25); 24-25 Октобар 2025.), по одлуци са 150. Наставно-научног већа, тачка 11 где је ННВ овластило декана за давање сагласности наставницима и сарадницима на учешће на конгресима у 2025. години. Наведена сагласност ми је потребна за аплицирање путем конкурса за средства Министарства науке и технолошког развоја и иновација за суфинансирање учешћа истраживача на научним скуповима у иностранству а према званичном позиву МНТР и списку обавезне документације. Уз молбу, прилажем пријављени Сажетак.

Унапред се захваљујем на разумевању.

23.07.2025.

Крагујевац

Доц. др Маријана Анђић

Ктедра за Фармацеутску технологију

Факултет медицинских наука у Крагујевцу

Poster presentation

Wound healing activity of *Helichrysum italicum* essential oil-based ointment in diabetic rat model

Marijana Andjic[1,2], Nevena Lazarevic[1,2,3], Aleksandar Kocovic[1,2], Vladimir Jakovljevic[2,3,4], Jovana Bradic[1,2]

[1] *Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia;*
[2] *Center of Excellence for Redox Balance Research in Cardiovascular and Metabolic Disorders, Kragujevac, Serbia;*
[3] *Department of Human Pathology, First Moscow State Medical University IM Sechenov, Moscow, Russia;*
[4] *Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia;*

* andjicmarijana10@gmail.com

Helichrysum italicum is a typical Mediterranean plant belonging to the *Asteraceae* family. *H. italicum* essential oil has been used traditionally for wound and burns treatment, but there is no scientific evidence that supports the traditional claim. Therefore, the aim of our study was to estimate the antioxidant activity of *H. italicum* essential oil and investigate the wound healing effects of *H. italicum*-based ointment in diabetic rat. The antioxidant activity of *H. italicum* essential oil was appraised by employing five *in vitro* test systems: 2,2-diphenyl-1-picrylhydrazyl (DPPH·) free radical scavenging assay, hydroxyl ion (·OH), nitric oxide (·NO), lipid peroxidation (LP) and ferric reduction antioxidant potential (FRAP) test. Thirty-two diabetic rats with the induced excision wound were used to evaluate *in vivo* wound healing effects of ointment. The animals were randomly divided into four groups: untreated, topically treated with either a 1% silver sulfadiazine, the ointment base, or *H. italicum* ointment. The response to the treatment was assessed by macroscopic and biochemical analysis. Essential oil exhibited scavenging of DPPH· and ·OH with IC_{50} values of 4.45 ± 0.44 and 13.33 ± 1.11 μg/ml, respectively. Furthermore, essential oil inhibited LP with IC_{50} = 10.48 ± 1.22 mg/mL. Topical application of the *H. italicum* ointment showed the highest wound contraction from day 7 to day 21 with the highest content of hydroxyproline in comparison to the all examined groups. Our findings revealed that the *H. italicum* ointment approach might serve as a promising and innovative tool for wound healing.