



Telephium imperati L.

MOLLUGINACEAE

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Synonyms

No synonyms recorded for the species (WFO 2023).

Local Names

Algeria: fattâtat lahjar (فَتَّاتَةُ لَحْجَر) (Yamina 2016); **Morocco:** alkhayata (Ajjoun et al. 2022); **French:** le téléphium d'Impérato (Dutoit and Tour-de-Peilz 1974).

Endemism

The native range of this species is Switzerland to Spain, and NW Africa. It is a subshrub and grows primarily in the temperate biome (Dobignard and Chatelain 2013).

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Botany and Ecology

Telephium imperati (L.) is an herbaceous plant and one of the species of Caryophyllaceae. It is native to Europe and Western Asia and is commonly found in dry, rocky habitats such as cliffs, slopes, and meadows. It grows wild on rocky terrain and rocks up to 3000 m (Nejjari et al. 2019). *T. imperati* is a perennial plant of 20–40 cm, glabrous and glaucous, with a thick stump, with many stems, prostrate-spreading, simple, very leafy; leaves alternate, almost one-sided, ovate, somewhat thickened, with short, membranous stipules; white flowers, rather large, in tight heads at the top of the stems; Sepals 5, oblong-linear, keeled, membranous at edges; 5 petals, oblong, equaling the calyx; 5 stamens; 3 styles, spread-curl; capsule trigone-pyramidal, attenuated in protruding beak, with 3 cells at the base, with 3 valves, and with 15–20 seeds. <https://www.tela-botanica.org/>.

Local Medicinal Uses

In **Morocco**, the aerial parts of this plant are used in traditional medicine to treat many diseases including digestives problems, cardiovascular diseases, and to minimize the symptoms of diabetes (Alami Merrouni et al. 2021; Fakchich and Elachouri 2021). The decoction of whole plant or leaves are used to treat wound (Ajjoun et al. 2022). The aim of the study was to evaluate the wound healing activity of 5% ointment of hydroalcoholic extract of *Telephium imperati* (L.) on Wistar rat's skin. Phytochemical screening, and thin-layer chromatography were carried out to identify possible compounds. Eighteen male Wistar Albinos rats (150–180 g) were divided into three groups. The test group was treated with experimental ointment, the control group treated with Vaseline, and the reference group was treated with standard drug (MADECASSOL[®]). Burn wounds were induced on dorsal area of the rat's body. The wound area measurement was carried out every 5 days during 55 days; and also histopathology evaluation was performed 24 h after burn wound creation, 15th, 25th, and 55th days. The results of physicochemical screening and thin-layer chromatography showed the presence of saponins, flavonoid, and quercetin. Significant wound healing activity was observed with topical application of *Telephium imperati* (L.) hydroalcoholic extract. Reduction of the wound area at the end of each treatment each was 95.5%, 97.5%, and 75.75% for the test, reference, and control groups, respectively. Moreover, the tissue histology of 5% ointment treated groups was most effect on the wound healing process with good fibroblasts proliferation, few inflammatory cells, and well-organized collagen. The results of this study confirmed the traditional use of *Telephium imperati* (L.) on wound healing management (Nejjari et al. 2019).

In **Algeria** folk medicine, an infusion of leaves of *Telephium imperati* is used externally as an antihemorrhoidal and astringent (Yamina 2016).

In **Turkey**, *Telephium imperati* leaves are used to heal wound (Tetik et al. 2013).

Toxicity

Telephium imperati (L.) is not toxic to pets (www.missouribotanicalgarden.org).

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