

The essential oil chemical composition of *Onobrychis kabylica* (Bornm.) Širj. plants growing wild in Algeria

Antonella Porrello, Maddalena Cerasola, Hamdi Bendif, Khellaf Rebbas & Maurizio Bruno

Natural Product Research

Received 09 Apr 2025, Accepted 18 Jun 2025, Published online: 28 Jun 2025

<https://doi.org/10.1080/14786419.2025.2523516>

Porrello, A., Cerasola, M., Bendif, H., Rebbas, K., & Bruno, M. (2025). The essential oil chemical composition of *Onobrychis kabylica* (Bornm.) Širj. plants growing wild in Algeria. *Natural Product Research*, 1–5. <https://doi.org/10.1080/14786419.2025.2523516>

Abstract

The genus *Onobrychis* Miller, belonging to the Fabaceae family, has wide distribution ranging from Europe to Mongolia and Himalaya, Arabian Peninsula, Ethiopia, with eastern Mediterranean area and western Asia considered as the centres of diversity. Plants from this genus have been used for centuries around the world, as forage for ruminant animals, both for grazing and as hay. The use of some species in traditional medicine has been also documented. *Onobrychis kabylica* (Bornm.) Širj. is a perennial species, that primarily thrives in temperate biomes endemic of Morocco, Algeria, and Tunisia. In this study, the chemical profile of the essential oil extracted from the aerial parts (**Ok**), never been previously analysed, was assessed using GC-MS. The **Ok** was found to be rich in oxygenated monoterpenes (44.4%) comprising of verbenone (14.0%) and borneol (10.4%) as main compounds.

Graphical Abstract

