The Mediterranean Ononis species, O. fruticosa, O. natrix subsp. ramosissima and O. tridentata, have been analyzed for their exudate flavonoids. More than 20 flavonoid aglycones were identified, some of which are rather rare natural compounds. One of them, namely hypolaelatin-8,3',4',trimethyl ether, had been found only once before. The results are presented in a table along with literature data, and the chemotaxonomic impact of the flavonoid patterns is discussed.

Key words: Ononis, Epicuticular Flavonoids, Chemosystematics