

PHENOLIC EXTRACTIVES FROM THE ACHENES OF *HELICHRYSUM ARENARIUM*

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Key Word Index—*Helichrysum arenarium*, Compositae, flavonoids, phthalides, arenol, homoarenol

Plant Helichrysum arenarium (L.) Moench *Source* Collected along the highway Malacky-Bratislava, Czechoslovakia The voucher specimen is deposited in the Herbarium of Inst of Org Chem and Biochem, Průhonice near Prague (specimen No 35/1972) *Uses* Flowers in medicine ¹ *Previous work* On flowers ²⁻⁴

Present work The dried ground achenes were extracted with light petrol and EtOH and were distributed between solvents as was described earlier for flowers ² Extracts containing phenolic compounds were column chromatographed on silica gel and on polyamide The compounds presented in Table 1 were identified by MS and NMR spectra and/or by direct comparison with authentic substances The Table shows also a comparison of the compounds isolated from achenes with those found in flowers from the same locality

TABLE 1

Compounds	Achenes	Flowers	Identification
3,5-Dihydroxy-6,7,8-trimethoxyflavone	+	+	MS, NMR m m p
Kaemferol	+	—	MS, NMR
Galangin	+	—	MS
Naringenin	+	+	m m p
5,7-Dihydroxyphthalide	+	+	m m p
5-Methoxy-7-hydroxyphthalide	+	+	m m p
Arenol and homoarenol (α -pyrone derivatives) ⁵	Trace	+	MS, m m p
Glucosides of flavones, flavanones and phthalides	—	+	

¹ GESSNER, O (1953) *Die Gift- und Arzneipflanzen von Mitteleuropa*, p. 683, Carl Winter Universitätsverlag, Heidelberg

² VRKOČ, J., HEROUT, V. and ŠORM, F. (1959) *Coll. Czech Chem. Commun.* **24**, 3938

³ HANSEL, R., HEISE, D., RIMPLER, H. and PINKEWITZ, G. (1963) *Arch. Pharmaz.* **296**, 468, and references therein

⁴ HANSEL, R., RIMPLER, H. and SCHWARZ, R. (1967) *Tetrahedron Letters* 735, and references therein

⁵ VRKOČ, J., DOLEJŠ, L., SEDMERA, P., VAŠÍČKOVÁ, S. and ŠORM, F. (1971) *Tetrahedron Letters* 247