

Pyrrolizidine Alkaloids from *Lithospermum canescens* Lehm.

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Seven pyrrolizidine alkaloids (PAs) have been isolated from *Lithospermum canescens* and their structures determined by spectroscopical methods. Besides the known lycopsamine, *O*⁷-acetyl-lycopsamine and *O*⁷-acetylintermediate four new PAs were found. Their structures are *O*⁷-(3-hydroxy-3-methyl-butanoyl)-*O*⁹-(+)-trachelanthoyl-heliotridine (= *O*⁷-(3-hydroxy-3-methyl-butanoyl)-rinderine = canescine), *O*⁷-(3-hydroxy-3-methyl-butanoyl)-*O*⁹-(–)-viridifloryl-heliotridine (= *O*⁷-(3-hydroxy-3-methyl-butanoyl)-echinatine = canescenine) and their *O*¹³-acetyl-derivatives (= acetylcanescine; acetylcanescenine).

Key words: *Lithospermum canescens*, Pyrrolizidine Alkaloids, Canescine and Derivatives