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# Valepotriate Hydrines Isolated from an Anticonvulsant Fraction of *Valeriana pavonii* Poepp. & Endl.

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***SUMMARY***. The present study deals with the isolation and identification of three valepotriate hydrines that are first reported in *Valeriana pavonii* Poepp. & Endl. (Valerianaceae), which were obtained from a dichloromethane fraction showing anticonvulsant activity *in vivo*. The isolation and purification of dichloromethane fraction was carried out by chromatographic techniques. The compounds were identified by comparison of their $^{1}H$ and $^{13}C$ NMR spectra with previously published data in scientific literature. Maximal electroshock seizure was used as *in vivo* pharmacological test, additionally *in vitro* GABA-A/BDZ-binding site studies were performed. Three valepotriate hydrines: valtrate acetoxyhydrine (**1**), valtrate isovaleroyloxyhydrine (**2**) and valtrate chlorohydrine (**3**), were isolated from a dichloromethane fraction that offered 90% protection against crisis-like tonic-clonic seizures in an *in vivo* pharmacological maximal electroshock seizure (MES) test in mice (35 mg/kg, p.o.). According to an *in vitro* GABA-A/BDZ binding site test, the mechanism of action for these compounds does not involve binding to the GABA-A receptor. These compounds are reported in this species for the first time. The valepotriate hydrines isolated from *V. pavonii* could be active metabolites of this species with anticonvulsant properties, however further *in vivo* an in vitro studies are required. Their molecular mechanisms of action are unrelated to the benzodiazepine binding site of the GABA-A receptor.

*KEY WORDS:* Anticonvulsant, GABA-A receptor, Tonic-clonic epilepsy, *Valeriana,* Valepotriate hydrines.

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