

Reference Material

Pyrrolizidine alkaloids and tropane alkaloids in dried nettle

P2203-RMNe



- Summary -

Please note:

Reference material P2203-RMNe is a validated control material and not a certified reference material. The reference material is validated in ring test P2203-RT with 11 laboratories. The ring test is organised, performed, and evaluated according to the requirements of DIN EN ISO/IEC 17043 and the “International Harmonized Protocol”. DIN ISO 13528 is considered during the evaluation of the submitted results of P2203-RT and during homogeneity testing. Details related to the applied statistics are summarised in the full specification, which is provided after purchase of the reference material.

The reference material consists of 120 g of dried nettle (powder), which contains incurred residues of two PAs and is spiked with seven PAs and the tropane alkaloids hyoscyamine and scopolamine (see table 1). The corresponding unspiked dried nettle (100 g, powder) is available as blank material P2203-BLNe. The blank material is free from incurred residues of all spiked PAs and TAs and contains incurred residues of two PAs (see table 1, incurred). Further incurred residues of PAs might be present at trace levels.

The reference material is validated in a ring test with 11 laboratories. The spiked levels as well as the assigned values, which are calculated of the results of the participants of P2203-RT, are summarised in table 1.

Table 1. Spiked levels and assigned values

Parameter	Spiked level [µg/kg]	Assigned value [µg/kg]	Total number of results
Hyoscyamine	27	27.3	8
Scopolamine	13	11.9	10
Heliosupine	29	26.3	10
Intermedine	17	14.4	10
Integerrimine	36	32.7	7
Senecionine	65	60.0	7
Sum of integerrimine and senecionine*	101	79.7	11
Lasiocarpine-NO	44	39.1	10
Retrorsine**	14	11.1	10
Senkirkine	18	16.5	11
Heliosupine-NO	incurred	10.3	7
Sum seneciphylline-NO/spartioidine-NO	incurred	8.06	8

* Sum of integerrimine and senecionine: the sum of integerrimine, senecionine and senecivernine is considered for evaluation.

** Retrorsine: the sum of retrorsine and usaramine is considered for evaluation.