

Annexe 1 - Valeurs des LOD et LOQ de différentes méthodes d'analyse des toxines T-2 et HT-2 (EFSA, 2011)

Matrix	Extraction	Clean-up	Detection	Analyte	LOD (µg/kg)	LOQ (µg/kg)	Recovery (%)	Reference
wheat, rice, oats	MeOH-H ₂ O	Immunoaffinity column	GC-ECD (PFPA)	T-2, HT-2	1.7-2.3	5.4-6.6	71-116	Majerus et al. (2008)
cereal based food including beer	ACN-H ₂ O	Reverse phase (C18), immunoaffinity, multifunctional columns	GC-ECD (PFPA), GC-MS, LC-DAD	DON, T-2, HT-2	not reported	0.1-1.4	70-130	Cano-Sancho et al. (2011)
wheat, maize, barley	MeOH-H ₂ O	Immunoaffinity column	HPLC-FLD (1-AN)	T-2, HT-2	3-5	not reported	70-103	Visconti et al. (2005)
oats, muesli, infant food, breakfast cereals	MeOH-H ₂ O	Immunoaffinity column	HPLC-FLD (1-AN)	T-2, HT-2	not reported	8	74-120	Trebstein et al. (2008)
wheat, maize	(CH ₃) ₂ CO-AcOH-H ₂ O	None	LC-APPI-MS/MS	Multitoxin method including T-2, HT-2	5-7	9-11	not reported	Capriotti et al. (2010)
tea and herbal infusions	EtOAc-HCOOH	NH ₂ -SPE	UHPLC-MS/MS	Multitoxin method including T-2, HT-2	3.4-12	6.8-24	97-106	Monbaliu et al. (2010)
beer, wine	HF-LPME	None	UHPLC-MS/MS	T-2, OTA	not reported	< 0.1	87-105	Romero-Gonzales et al. (2010)
beer	addition of ACN	None	UHPLC-orbitrapMS	Multitoxin method including T-2, HT-2	not reported	1.5-6	88-119	Zachariasova et al. (2010)
maize, oats	ACN-H ₂ O	Multifunctional columns	LC-APCI-MS/MS	T-2	not reported	2-4	99-100	Haeubl et al. (2007)
maize, wheat, oats	PBS-buffer	Immunoaffinity column	LC-APCI-MS/MS	T-2, HT-2	0.4-0.5	not reported	61-97	Lattanzio et al. (2009)
cereals, soya, maize, gluten	QuEChERS ASE	None	LC-ESI-MS/MS	Multitoxin method including T-2, HT-2	not reported	5-125	65-117	Desmarchelier et al. (2010)

MeOH: methanol; H₂O: water; ACN: acetonitrile; (CH₃)₂CO: acetone; AcOH: acetic acid; EtOAc: ethyl acetate; HCOOH: formic acid; HF-LPME: hollow fiber liquid-phase micro extraction; PBS: phosphate buffered saline; QuEChERS: quick, easy, cheap, effective, rugged and safe; ASE: accelerated solvent extraction; GC: gas chromatograph; ECD: electron capture detector; PFPA: pentafluoropropionic anhydride; HPLC: high performance-liquid chromatography; FLD: fluorescence detector; 1-AN: 1-anthroylnitrile; MS: mass spectrometer; LC: liquid chromatograph; DAD: diode-array detector; APPI: atmospheric pressure photoionisation; MS/MS: tandem mass spectrometer; UHPLC: ultra high performance-liquid chromatograph; APCI: atmospheric pressure chemical ionisation; ESI: electrospray ionisation; T-2: T-2 toxin; HT-2: HT-2 toxin; DON: deoxynivalenol; OTA: ochratoxin A.

