



図2 乾海苔試料の高分解能GC/MSクロマトグラム(OCDD)

(A)振とう抽出試料、(B)振とう抽出により得られた抽出残渣を高速溶媒抽出に供した試料

表4 高速溶媒抽出による植物性食品試料中ダイオキシン類のCS回収率(%)

	1	2	3	4	5	6	7	8
	りんご	りんご	柿	ぶどう	茶葉	茶葉	茶葉	茶葉
2, 3, 7, 8-TeCDD	99	91	89	83	81	89	84	87
1, 2, 3, 7, 8-PeCDD	86	88	87	74	67	72	67	75
1, 2, 3, 4, 7, 8-HxCDD	91	95	91	75	74	73	64	77
1, 2, 3, 6, 7, 8-HxCDD	81	88	89	73	68	71	61	76
1, 2, 3, 7, 8, 9-HxCDD	97	98	99	82	72	77	67	81
1, 2, 3, 4, 6, 7, 8-HpCDD	88	92	89	67	64	68	59	77
OCDD	100	103	105	75	63	78	69	82
2, 3, 7, 8-TeCDF	108	101	97	84	89	92	96	90
1, 2, 3, 7, 8-PeCDF	86	87	90	80	70	75	69	73
2, 3, 4, 7, 8-PeCDF	87	83	84	79	73	79	75	73
1, 2, 3, 4, 7, 8-HxCDF	85	87	83	84	75	77	73	75
1, 2, 3, 6, 7, 8-HxCDF	83	82	82	78	69	70	66	71
2, 3, 4, 6, 7, 8-HxCDF	98	99	104	92	90	90	84	86
1, 2, 3, 7, 8, 9-HxCDF	98	105	97	98	79	88	78	70
1, 2, 3, 4, 6, 7, 8-HpCDF	89	97	88	91	85	85	75	81
1, 2, 3, 4, 7, 8, 9-HpCDF	97	97	96	88	81	86	69	80
OCDF	107	109	111	72	68	79	69	81
3, 3', 4, 4' -TeCB (#77)	79	74	65	58	69	73	72	69
3, 3', 4, 5' -TeCB (#81)	70	63	53	45	64	62	65	59
3, 3', 4, 4', 5 -PeCB (#126)	80	83	84	76	73	81	72	74
3, 3', 4, 4', 5, 5' -HxCB (#169)	86	87	92	81	76	84	71	80
2, 3, 3', 4, 4' -PeCB (#105)	77	78	76	73	65	60	66	61
2, 3, 4, 4', 5 -PeCB (#114)	82	76	79	77	71	66	68	63
2, 3', 4, 4', 5 -PeCB (#118)	76	70	77	74	67	60	62	59
2', 3, 4, 4', 5 -PeCB (#123)	78	74	74	74	66	59	63	59
2, 3, 3', 4, 4', 5 -HxCB (#156)	73	74	75	71	60	61	72	62
2, 3, 3', 4, 4', 5' -HxCB (#157)	68	70	67	67	57	63	71	64
2, 3', 4, 4', 5, 5' -HxCB (#167)	75	74	74	71	59	62	67	63
2, 3, 3', 4, 4', 5, 5' -HpCB (#189)	76	80	74	72	66	66	76	69

	9	10	11	12	13	14	15	16
	ほうれん草	ちんげんさい	ちんげんさい	ちんげんさい	切り干し大根	切り干し大根	乾海苔	乾ひじき
2, 3, 7, 8-TeCDD	91	98	88	85	105	98	105	76
1, 2, 3, 7, 8-PeCDD	79	84	82	82	90	85	92	72
1, 2, 3, 4, 7, 8-HxCDD	84	90	87	87	94	85	105	77
1, 2, 3, 6, 7, 8-HxCDD	78	81	81	81	84	77	98	74
1, 2, 3, 7, 8, 9-HxCDD	87	91	92	89	92	88	110	78
1, 2, 3, 4, 6, 7, 8-HpCDD	84	84	83	84	89	80	88	94
OCDD	110	70	92	91	101	86	99	83
2, 3, 7, 8-TeCDF	97	102	93	87	113	103	114	79
1, 2, 3, 7, 8-PeCDF	76	81	76	76	88	82	88	63
2, 3, 4, 7, 8-PeCDF	78	81	76	79	87	80	90	62
1, 2, 3, 4, 7, 8-HxCDF	80	87	81	84	85	79	96	66
1, 2, 3, 6, 7, 8-HxCDF	79	83	79	79	82	77	95	64
2, 3, 4, 6, 7, 8-HxCDF	96	95	96	93	98	88	113	79
1, 2, 3, 7, 8, 9-HxCDF	88	90	91	91	95	90	109	83
1, 2, 3, 4, 6, 7, 8-HpCDF	86	92	85	89	94	84	96	97
1, 2, 3, 4, 7, 8, 9-HpCDF	91	87	92	95	98	91	99	85
OCDF	103	95	73	94	95	90	100	83
3, 3', 4, 4' -TeCB (#77)	66	83	69	62	79	75	80	62
3, 3', 4, 5' -TeCB (#81)	54	76	61	50	65	65	69	52
3, 3', 4, 4', 5 -PeCB (#126)	72	86	76	78	86	80	81	62
3, 3', 4, 4', 5, 5' -HxCB (#169)	78	92	86	90	91	84	91	66
2, 3, 3', 4, 4' -PeCB (#105)	75	78	72	69	69	70	80	61
2, 3, 4, 4', 5 -PeCB (#114)	71	76	74	67	73	71	79	63
2, 3', 4, 4', 5 -PeCB (#118)	71	73	66	67	68	68	82	59
2', 3, 4, 4', 5 -PeCB (#123)	70	74	68	65	71	69	95	67
2, 3, 3', 4, 4', 5 -HxCB (#156)	78	75	73	69	68	70	74	61
2, 3, 3', 4, 4', 5' -HxCB (#157)	75	76	67	66	67	69	77	62
2, 3', 4, 4', 5, 5' -HxCB (#167)	77	76	71	71	76	74	77	64
2, 3, 3', 4, 4', 5, 5' -HpCB (#189)	80	78	72	70	74	85	91	68

(表4の続き)

	17	18	19	20	21
	乾ひじき	乾昆布	柿	乾海苔	切り干し大根
2, 3, 7, 8-TeCDD	95	79	96	91	105
1, 2, 3, 7, 8-PeCDD	82	69	90	79	91
1, 2, 3, 4, 7, 8-HxCDD	82	76	86	97	99
1, 2, 3, 6, 7, 8-HxCDD	76	69	89	93	98
1, 2, 3, 7, 8, 9-HxCDD	85	76	95	101	90
1, 2, 3, 4, 6, 7, 8-HpCDD	86	83	89	77	99
OCDD	89	81	82	82	111
2, 3, 7, 8-TeCDF	100	86	95	103	116
1, 2, 3, 7, 8-PeCDF	79	68	82	74	86
2, 3, 4, 7, 8-PeCDF	79	67	82	78	91
1, 2, 3, 4, 7, 8-HxCDF	80	70	82	87	95
1, 2, 3, 6, 7, 8-HxCDF	76	67	80	81	89
2, 3, 4, 6, 7, 8-HxCDF	89	83	97	108	116
1, 2, 3, 7, 8, 9-HxCDF	86	77	97	104	109
1, 2, 3, 4, 6, 7, 8-HpCDF	86	85	90	82	91
1, 2, 3, 4, 7, 8, 9-HpCDF	93	86	103	82	89
OCDF	89	82	98	77	113
3, 3', 4, 5'-TeCB(#81)	69	55	52	74	75
3, 3', 4, 4'-TeCB(#77)	78	63	67	80	85
3, 3', 4, 4', 5-PeCB(#126)	79	65	84	80	95
3, 3', 4, 4', 5, 5'-HxCB(#169)	84	72	95	85	101
2, 3, 3', 4, 4'-PeCB(#105)	78	62	76	56	78
2, 3, 4, 4', 5-PeCB(#114)	79	66	83	67	80
2, 3', 4, 4', 5-PeCB(#118)	75	57	68	61	72
2', 3, 4, 4', 5-PeCB(#123)	77	60	72	63	79
2, 3, 3', 4, 4', 5-HxCB(#156)	78	61	79	52	72
2, 3, 3', 4, 4', 5'-HxCB(#157)	81	65	81	52	77
2, 3', 4, 4', 5, 5'-HxCB(#167)	89	61	78	56	78
2, 3, 3', 4, 4', 5, 5'-HpCB(#189)	90	72	88	65	84