

Fig.1 Typical chromatogram (A) and spectrum (B) of standard solution of BPA (0.5ppm).

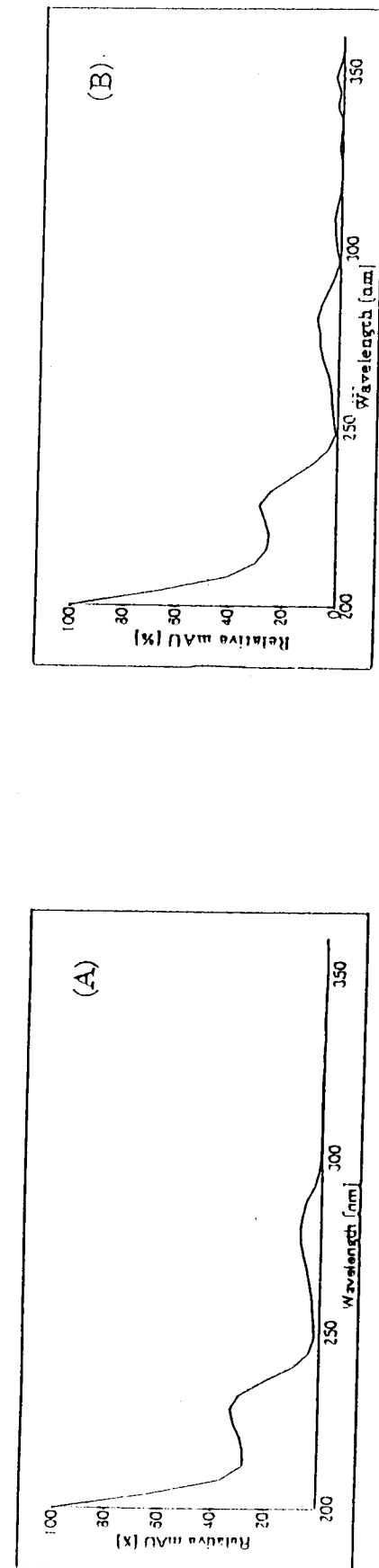
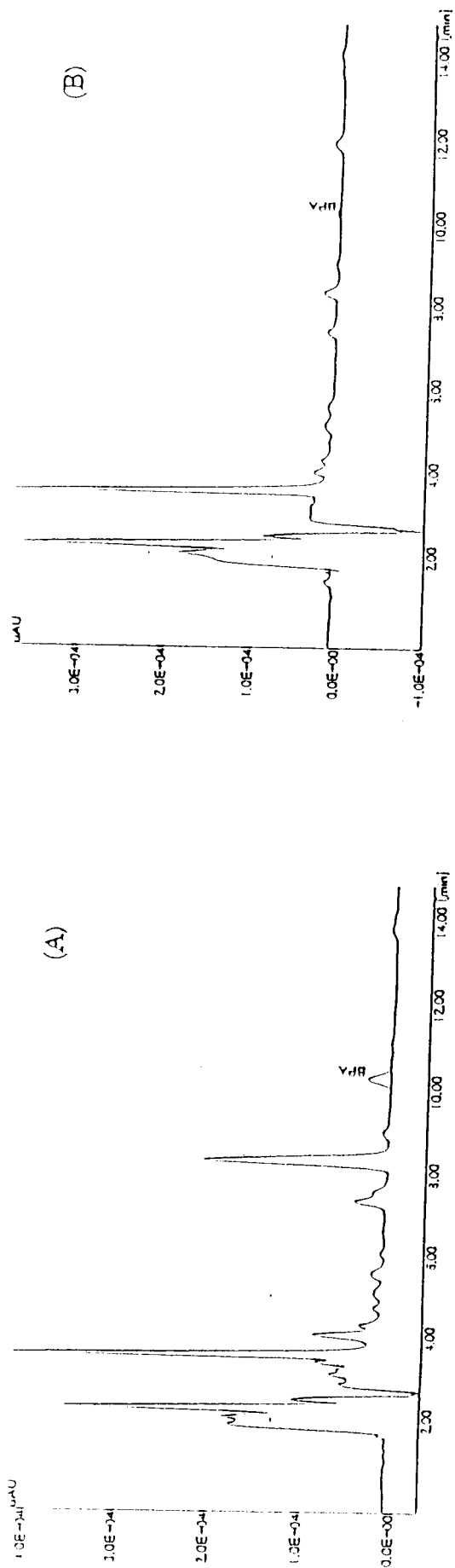


Fig.2 Typical chromatograms and peak spectra obtained from solid and aqueous portions of canned corn.

(A) Solid portion of canned corn, (B) Aqueous portion of canned corn.

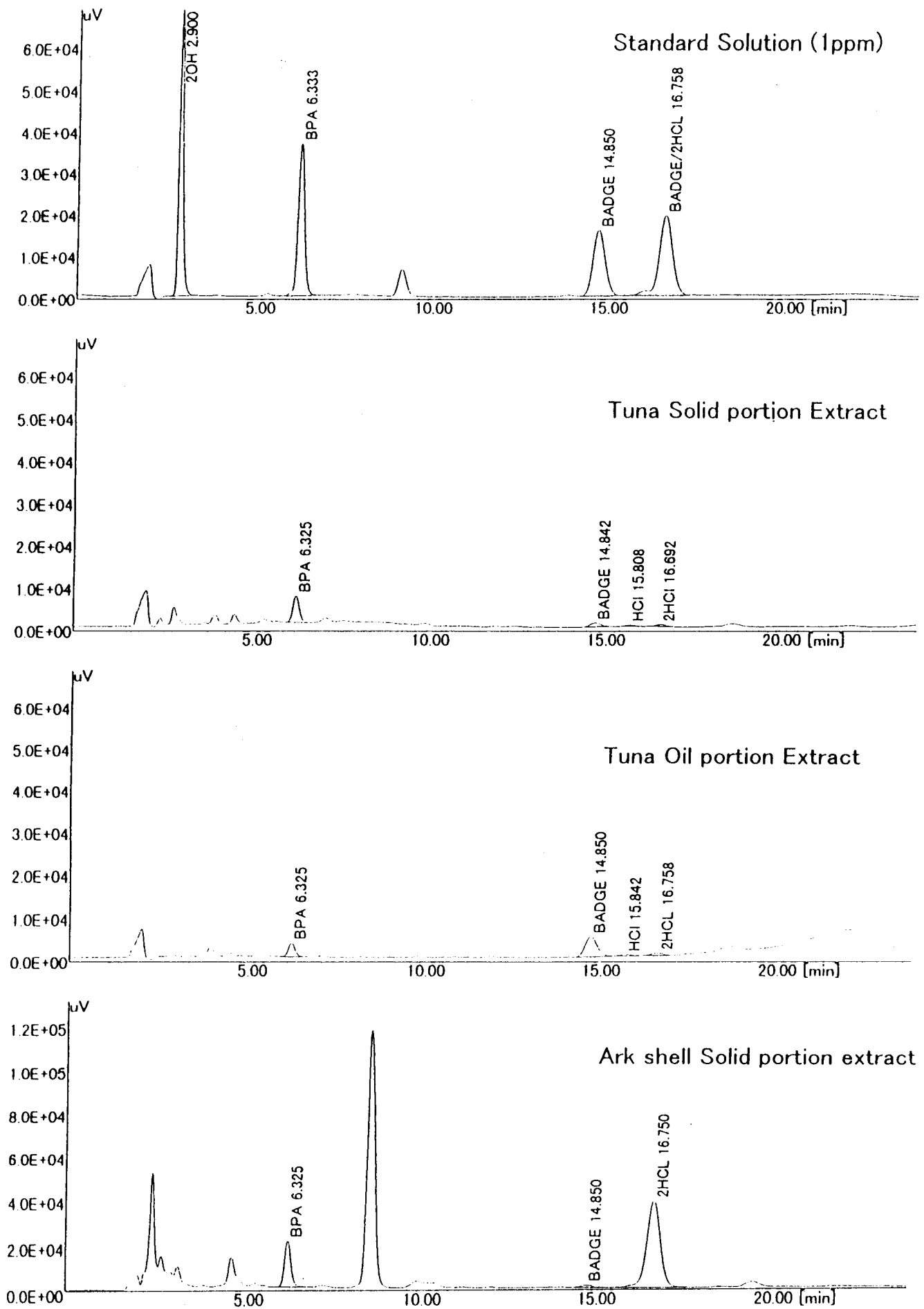


Fig.3 Typical chromatograms obtained from standard solution and sample extract.

# 添加回収実験

Table 1

試料	添加量 (μg)				回収率% (相対標準偏差%)			
	BPA	BADGE	BADGE·HCl	BADGE·2HCl	BPA	BADGE	BADGE·HCl	BADGE·2HCl
ゆでたとうもろこし(5g)	1.0	90.1(3.4)	85.2(5.2)	87.2(3.8)	86.8(3.9)			
ゆでた鶏肉(5g)	0.5	90.9(3.9)	86.2(4.8)	85.4(4.1)	85.5(4.1)			
ゆでた鮭肉(5g)	0.5	87.5(3.1)	83.5(5.1)	86.5(3.5)	84.4(4.6)			
パイン缶缶汁(10mL)	0.5	86.3(4.0)	69.1(7.5)	75.6(5.5)	86.8(3.4)			
サラダ油(2.5g)	1.0	91.7(2.5)	94.0(4.4)	93.3(4.1)	98.2(4.5)			

**Table 2 Concentration of BPA in Fruit Cans ( $\mu\text{g}/\text{can}$ )**

Type of Can	Number of Samples	BPA ( $\mu\text{g}/\text{can}$ )				
		N.D.	<1	1-5	5-10	10<
	17	16	0	1	0	0
2p	Ea	0	0	0	0	0
	Not Ea	0	0	0	0	0
3p	Ea	4	3	0	1	0
	Not Ea	13	13	0	0	0

Detectable Concentration of BPA:  $1.5\mu\text{g}/\text{can}$

**Table 3 Concentration of BPA in Vegetable Cans ( $\mu\text{g}/\text{can}$ )**

Type of Can	Number of Samples	BPA ( $\mu\text{g}/\text{can}$ )				
		N.D.	<1	1-5	5-10	10<
	34	6	0	15	9	4
2p	Ea	1	0	1	0	0
	Not Ea	3	0	2	1	0
3p	Ea	20	3	8	5	4
	Not Ea	10	3	4	4	0

Detectable Concentration of BPA:  $1.0-14.2\mu\text{g}/\text{can}$

**Table 4 Concentration of BPA in Fish and Meat Cans ( $\mu\text{g}/\text{can}$ )**

Type of Can	Number of Samples	BPA ( $\mu\text{g}/\text{can}$ )				
		N.D.	<1	1-5	5-10	10<
	21	3	0	9	4	5
2p	Ea	10	3	3	2	2
	Not Ea	0	0	0	0	0
3p	Ea	9	0	4	2	3
	Not Ea	2	0	2	0	0

Detectable Concentration of BPA:  $2.4-22.6\mu\text{g}/\text{can}$

\*2p,3p: 2 or 3 pieces can

\*\*Ea: can with easy open lid

Table 5. Concentration of BPA, BADGE, BADGE/HCl and BADGE/2HCl in Food Cans

Sample	BPA(ppb)			BADGE(ppb)			BADGE/HCl(ppb)			BADGE/2HCl(ppb)			Total( $\mu\text{g}/\text{Can}$ )				
	Type*	Solid	Aq	Oil	Solid	Aq	Oil	Solid	Aq	Oil	Solid	Aq	Oil	BPA	BADGE	HCl	2HCl
Corn	Ea, 3p	37	ND	-	16	ND	-	127	ND	-	4.7	2.1	2.1	16.5			
Corn	Ea, 3p	43	ND	-	34	ND	-	87	ND	-	6.3	4.4	1.9	11.6			
Corn (Cream)	Ea, 3p	13	-	-	ND	-	-	ND	-	-	1.1	-	-	-			
Tomato	Ea, 3p	18	ND	-	ND	ND	-	ND	ND	-	7.1	-	-	-			
Greenpeas	Ea, 3p	125	6	-	ND	ND	-	33	ND	-	6.9	-	-	2.0			
Greenpeas	Ea, 3p	51	ND	-	ND	ND	-	26	ND	-	2.8	-	-	1.5			
Pineapple	3p	ND	ND	-	ND	ND	-	ND	ND	-	-	-	-	-			
Oil Sardine	Ea, 2p	215	-	205	ND	-	ND	75	-	170	22.6	-	-	9.3			
Oil Sardine	Ea, 2p	44	-	60	ND	-	ND	ND	-	ND	5.6	-	-	-			
Oil Sardine	Ea, 2p	ND	-	ND	ND	-	ND	ND	-	ND	-	-	-	-			
Saury (Grilled)	Ea, 2p	13	-	24	ND	-	ND	ND	-	19	1.2	-	-	0.1			
Tuna (Boiled in oil)	Ea, 2p	35	-	64	ND	-	ND	ND	-	ND	3.1	-	-	-			
Tuna (Boiled in oil)	Ea, 3p	32	-	44	11	-	10 (tr.8)	20	-	20	0.6	0.1	0.1	-			
Tuna (non-oil)	Ea, 3p	63	-	-	ND	-	-	40	-	-	5.0	-	-	3.2			
Sermon (Boiled)	Ea, 3p	25	-	-	ND	-	-	ND	-	-	1.7	-	-	-			
Crab (Boiled)	3p	26	-	-	ND	-	-	ND	-	-	2.4	-	-	-			
Crab (Boiled)	Ea, 2p	106	-	-	ND	-	-	ND	-	-	5.8	-	-	-			
Ark shell (Cooked)	Ea, 3p	96	-	-	ND	-	-	429	-	-	10.6	-	-	47.2			
Roast Chicken (Yakitori)	Ea, 2p	91	-	-	ND	-	-	ND	-	-	6.4	-	-	-			
Meat sauce	Ea, 3p	35	-	-	ND	-	-	ND	-	-	10.2	-	-	-			
<p>Detection limit 10 5 10 10 5 10 10 5 10 10 5 10 18/20 3/20 3/20 9/20</p>																	

Type\* Ea: Can with easy open lid  
2p, 3p: Two or three-piece can