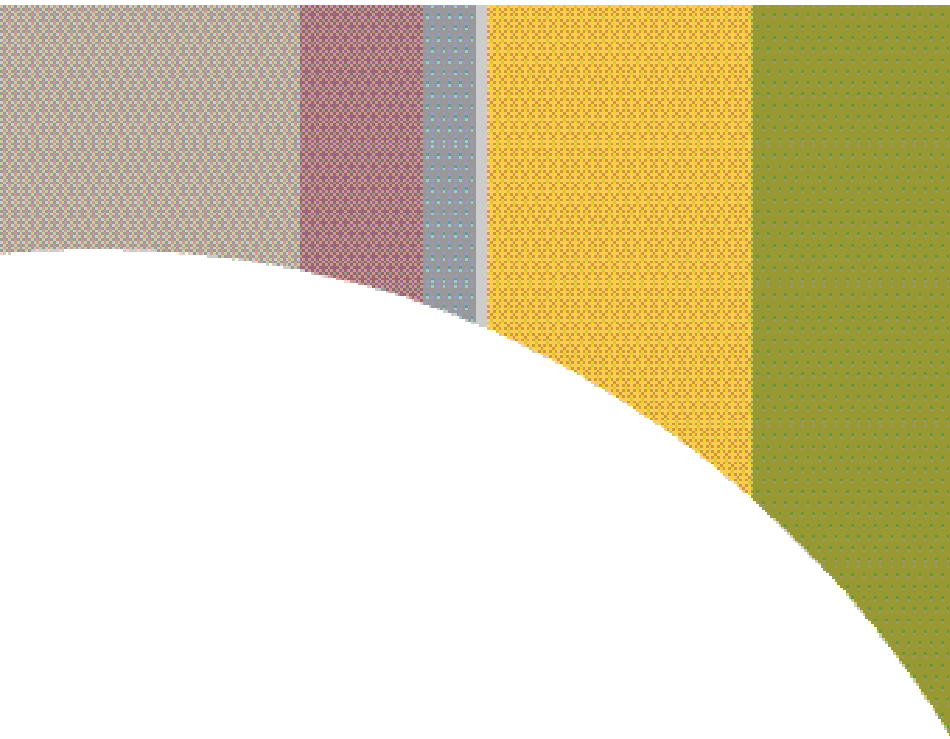


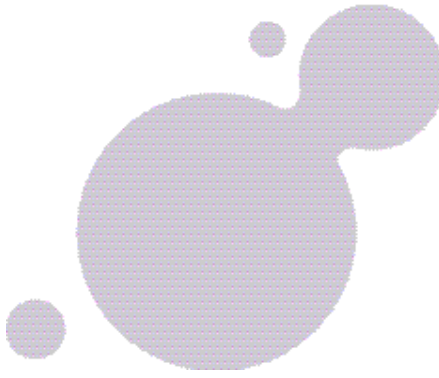
Korean Coastal and Offshore Fishery Census



[]



해양수산부
국립수산과학원
National Fisheries Research &
Development Institute



致辭

가 240

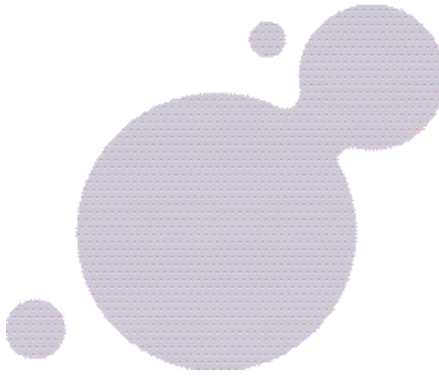
가

가

2002 ~ 2004 3

가

2004. 12.



發 刊 辭

가
,

가

EEZ

EEZ

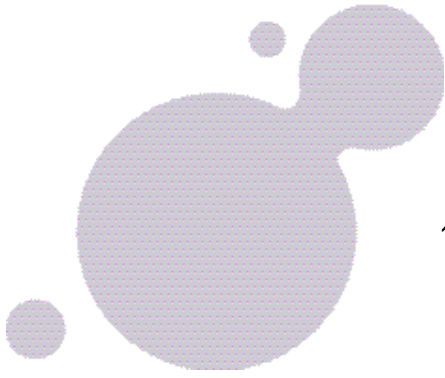
2002 2004

()가

가

EEZ

2004. 12.



1.

2002 2

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, 2002 5 ,
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, 2002 9 2004 12 ,
.
: 11

2.

가.

- (1) : 가 , ,
, ,
- (2) : 가 , ,
- (3) : () 가 ,
, ,
- (4) : ,
, .

3.

가
2003 12 , 2002 12 .
2004 8
2003 12
1
1 , 8 .
1 9 .

1.	가	15
2.		15
3.		16
4.		.....	17

1.	가 .		
	가.	.....	21
	.	.....	23
	.	.....	24
	.	.....	24
	.	.....	24
2.	가.		
	1)	.....	25
	가)	.....	25
	)	.....	30
	)	( ) .....	39
	)	( ) .....	42
	)	.....	47
	)	.....	50
	)	.....	54
	)	.....	55
	)	( ) .....	60
	)	.....	64
	)	.....	67
	)	( ) .....	70
	)	( ) .....	75

)	.....	78
2)	.....	79
가)	.....	79
)	.....	83
)	.....	86
)	.....	89
)	()	93
)	()	95
3)	(,)	97
가)	.....	97
)	.....	99
)	.....	101
)	.....	103
)	.....	105
)	.....	107
)	.....	109
)	.....	111
)	.....	113
4)	.....	116
가)	.....	116
)	.....	118
)	.....	120
)	.....	122
5)	.....	124
.		
1)	.....	126
2)	.....	127

3.

가.

1)	.....	135
2)	.....	136

·		
1)	.....	138
2)	.....	139
3)	.....	140
4.		
가.		
1)	.....	175
가)	.....	175
)	.....	176
)	.....	180
2)	.....	186
가)	.....	186
)	.....	187
)	.....	192
)	가 가	198
3)	.....	202
가)	.....	202
)	.....	203
)	.....	205
)	.....	207
·		
1)	.....	211
가)	.....	211
)	.....	214
)	.....	218
)	가	221
2)	.....	227
가)	.....	227
)	가	228
)	.....	231
)	가	235

CHAPTER 1

1. 가 .
- 2.
- 3.
- 4.

1. 가 .

가 2003 12 31 , 가 2002 12 31 1998 2003 가 .

2.

가. (CPUE)

, 2
,
2002 10 2003 12 .
.
, (,)
,
.
2
, , , ,
2002 10
2003 12 가 .

6

(Mitutoyo, CD-15)
 0.1cm (Sartorius, M-5500S) 0.01g
 (immature), (maturing), (mature), (spent) 4
 (gonadosomatic index : GSI) / x100

$$(w)/ (W) \times (w)$$

Gilson (Love and Westphal, 1981)

가 1cm

, 50% logistic

3.

가.

mm

3 , 3~5 , 5~8 3
mm

m

4.

가.

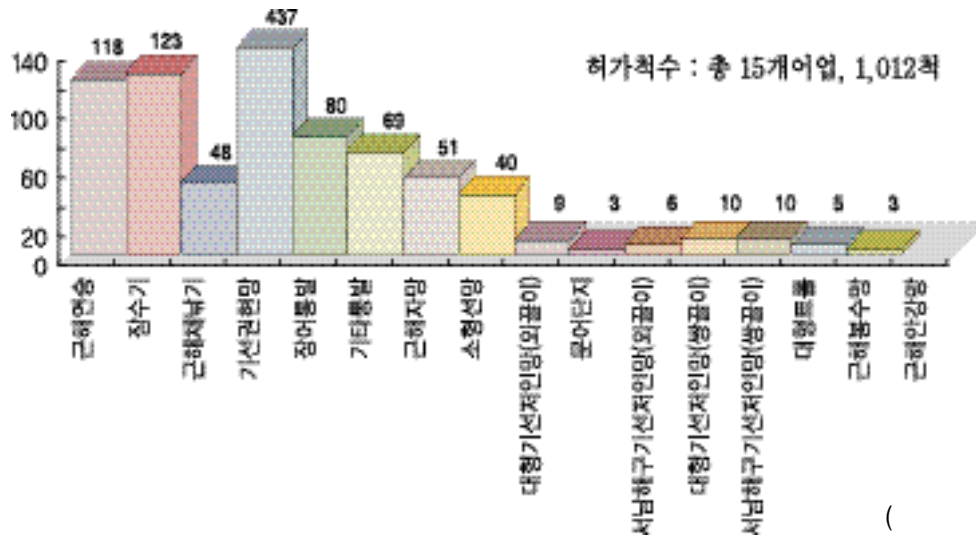
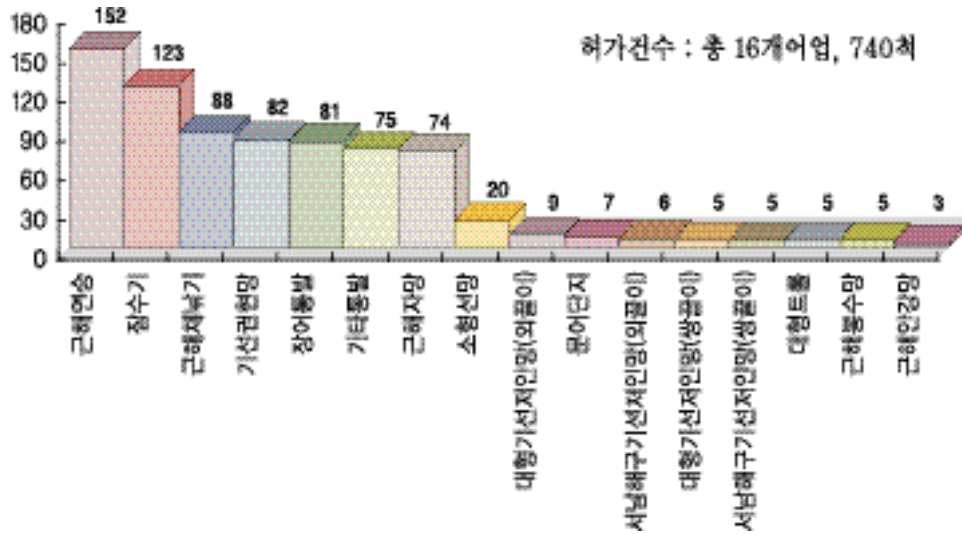
가 가

CHAPTER 2

1. 가 .
- 2.
- 3.
- 4.

[1. 가 .]

가.



1-1. 가

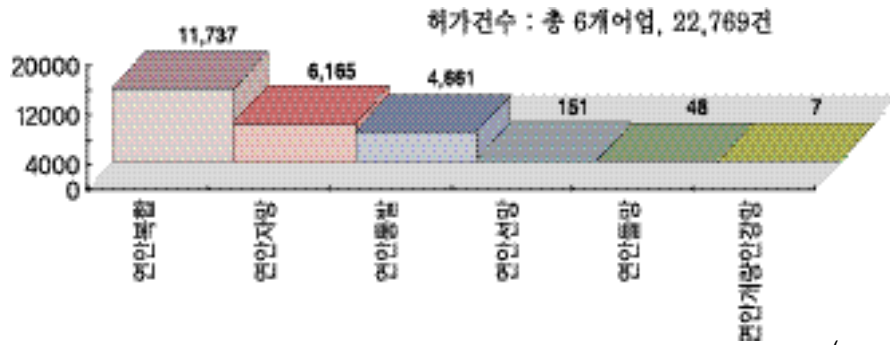
16 , 740 가 , 1,012 가 가 . 가
 152 가 , 123 , 88 ,
 82 , 81 , 75 , 74 , 20 . 가
 437 가 , 123 , 118 , 80
 , 69 , 51 , 48 .

1-1.

(:)

	1998	1999	2000	2001	2002	2003	
	198,954	175,578	145,558	168,346	161,701	180,590	171,788
	107,343	89,704	74,548	89,949	87,233	120,167	94,824
()	40,968	47,382	42,341	42,989	36,678	27,985	39,724
	13,577	10,363	9,088	10,509	4,682	6,970	9,198
	10,792	8,095	2,032	6,384	8,451	3,558	6,552
	4,716	5,458	5,349	5,106	4,836	4,381	4,974
	3,081	2,546	1,650	1,667	10,835	9,231	4,835
	7,289	2,026	3,377	4,043	2,916	2,029	3,613
	4,368	2,722	1,597	894	2,333	2,589	2,417
	2,018	2,775	1,780	3,993	2,236	1,432	2,372
	2,173	2,483	2,826	1,655	376	1,872	1,898
()	1,564	1,102	221	244	320	276	621
()	453	392	352	387	358	34	329
()	453	392	352	387	358	34	329
	159	138	45	139	89	32	100

(1998~2003) 1998 198,954 가
 , 1999 175,578 , 2000 145,558 , 2002 2003 161,701 ,
 180,590 .
 6 , 94,824 가
 , () , , , , ,
 . 2003 , 가 ,



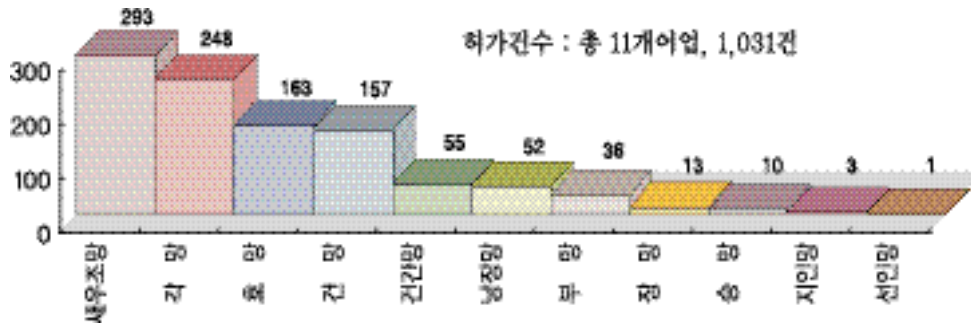
1-2. 가 ()

6 , 22,769 가 가 . 가
 11,737 가 , 6,165 , 4,661 ,
 151 , 48 , 7 .

1-2. (:)

	1998	1999	2000	2001	2002	2003	
	13,824	9,117	12,647	11,668	11,832	16,187	12,546
	9,537	5,868	8,814	7,554	7,493	6,184	7,575
	3,313	2,916	3,268	2,472	3,160	2,628	2,960
	0	0	0	0	0	6,347	1,058
	786	68	557	1,620	1,173	982	864
	144	264	0	20	0	6	72
	44	1	8	2	6	40	17

(1998~2003) 2003 16,187 가
 , 1999 9,117 가 , 2000 12,647 , 2001 11,668 ,
 2002 11,832 .
 6 , 7,575 가
 , 2,960 , 1,058 .
 가 .



1-3. 가 ()

11 , 1,031 가 가 . 가

293 가 , 248 , 163 , 157 , 55 , 52 , 36 , 13 , 10 . 가 1 1

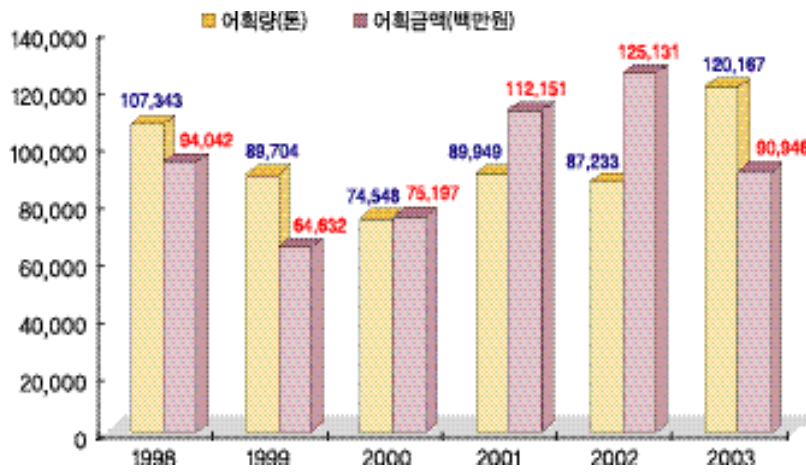
가

2003 202 , 1,820ha 가 가 .

1,753 , 67,119ha .

[2.]

가.
1)
가)

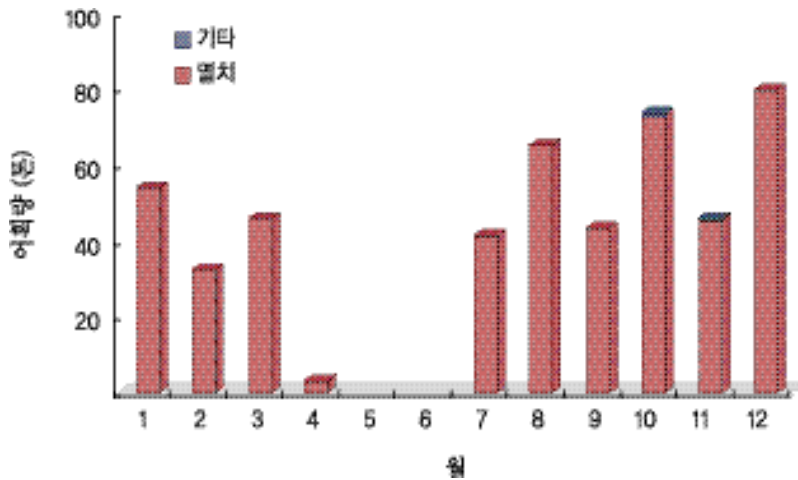


2-1.

()

가
가

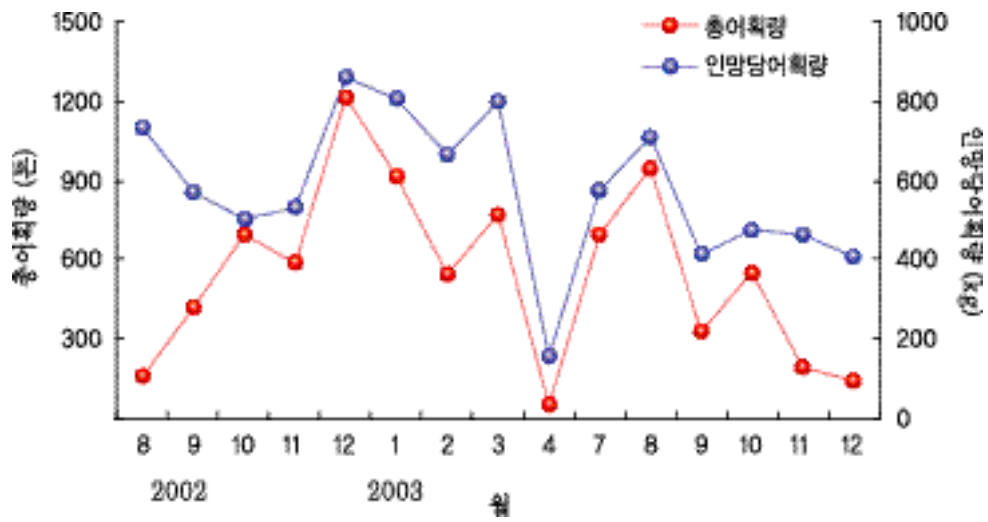
, 2000 74,548 가 , 2002 120,167



2-2.

()

2003 12 85 가 , 4 가
5~6



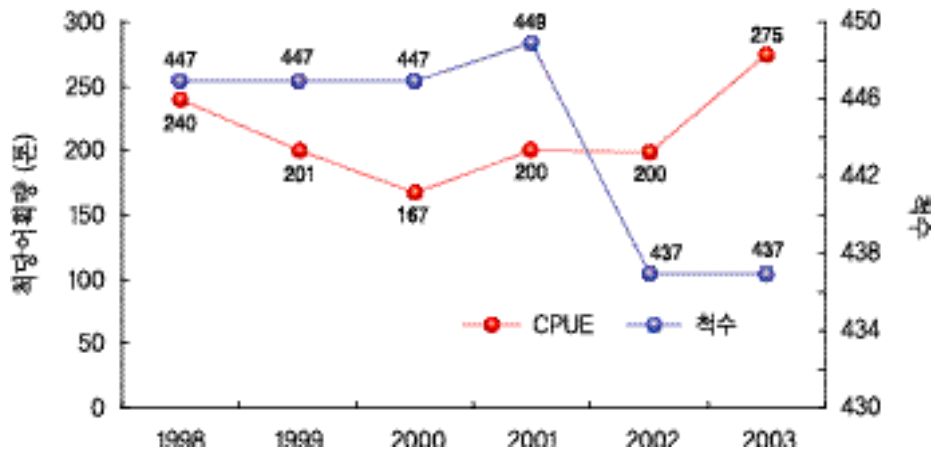
2-3.

(CPUE)

. 2002

0.6

, 2003 0.5
, 2002 12 가



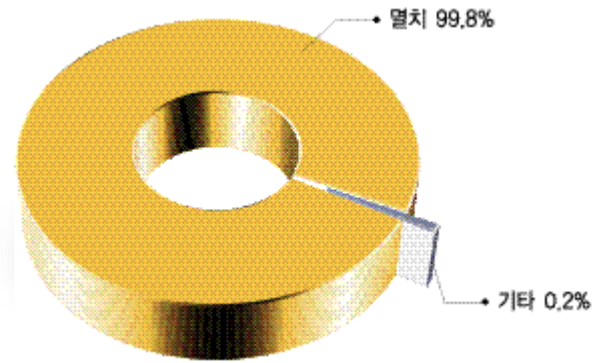
2-4.

(CPUE)

2003 275 가 , 2000 167

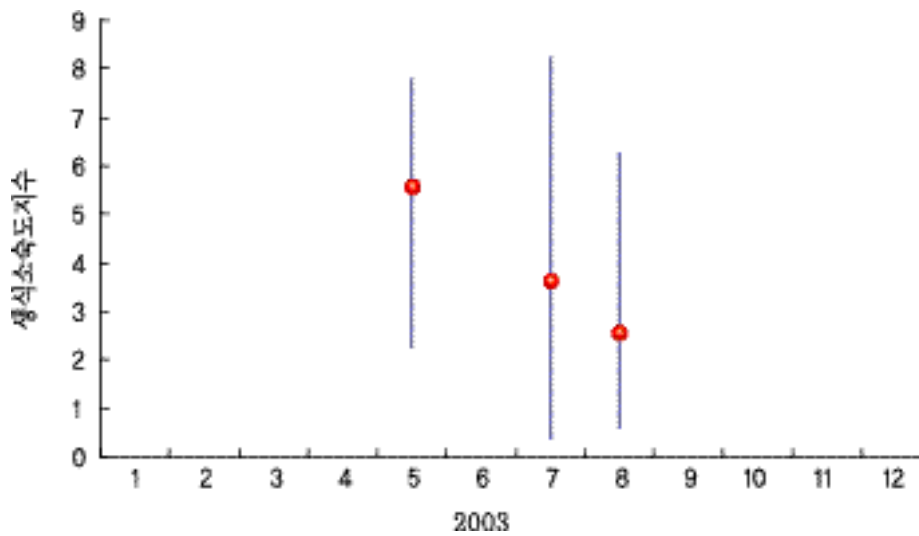
가

2003 437 2001

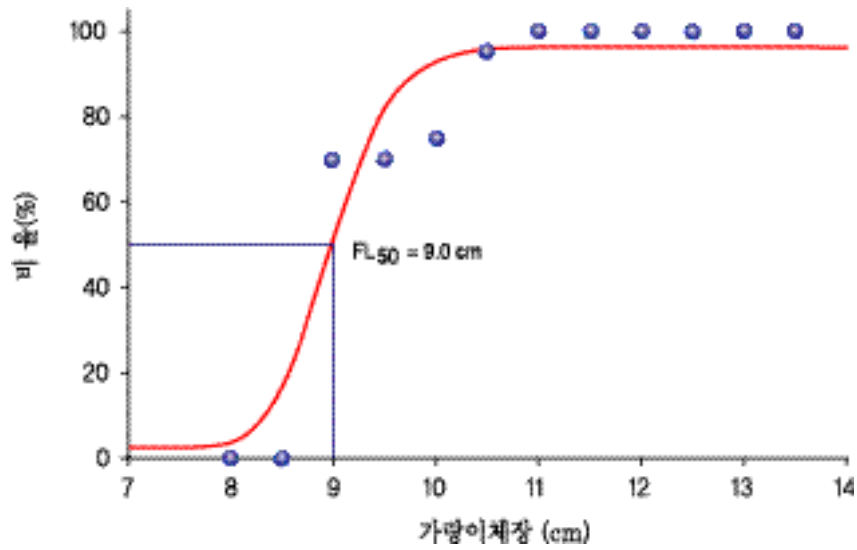


, 가 99.8%

4~8 , 5~7 , 16,000 ,
 1,700 , 50% (Fork Length) 9.0cm
 , 1.2 .

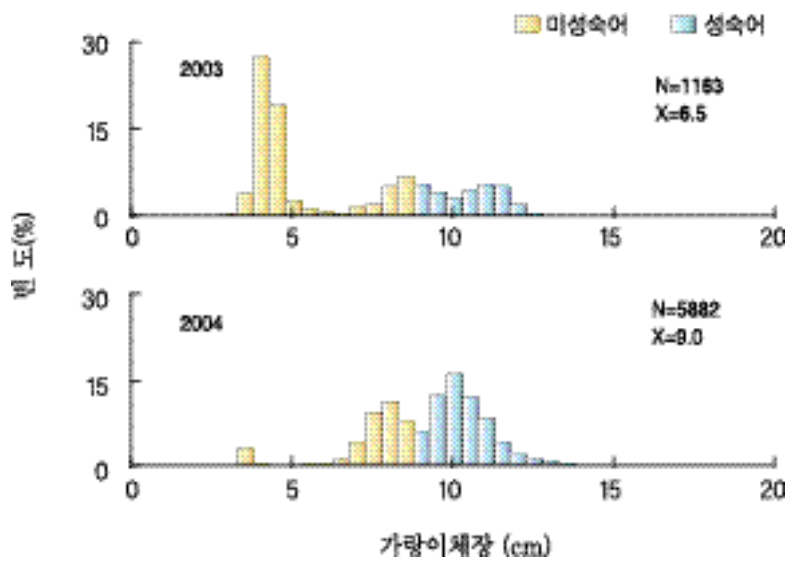


2-6.

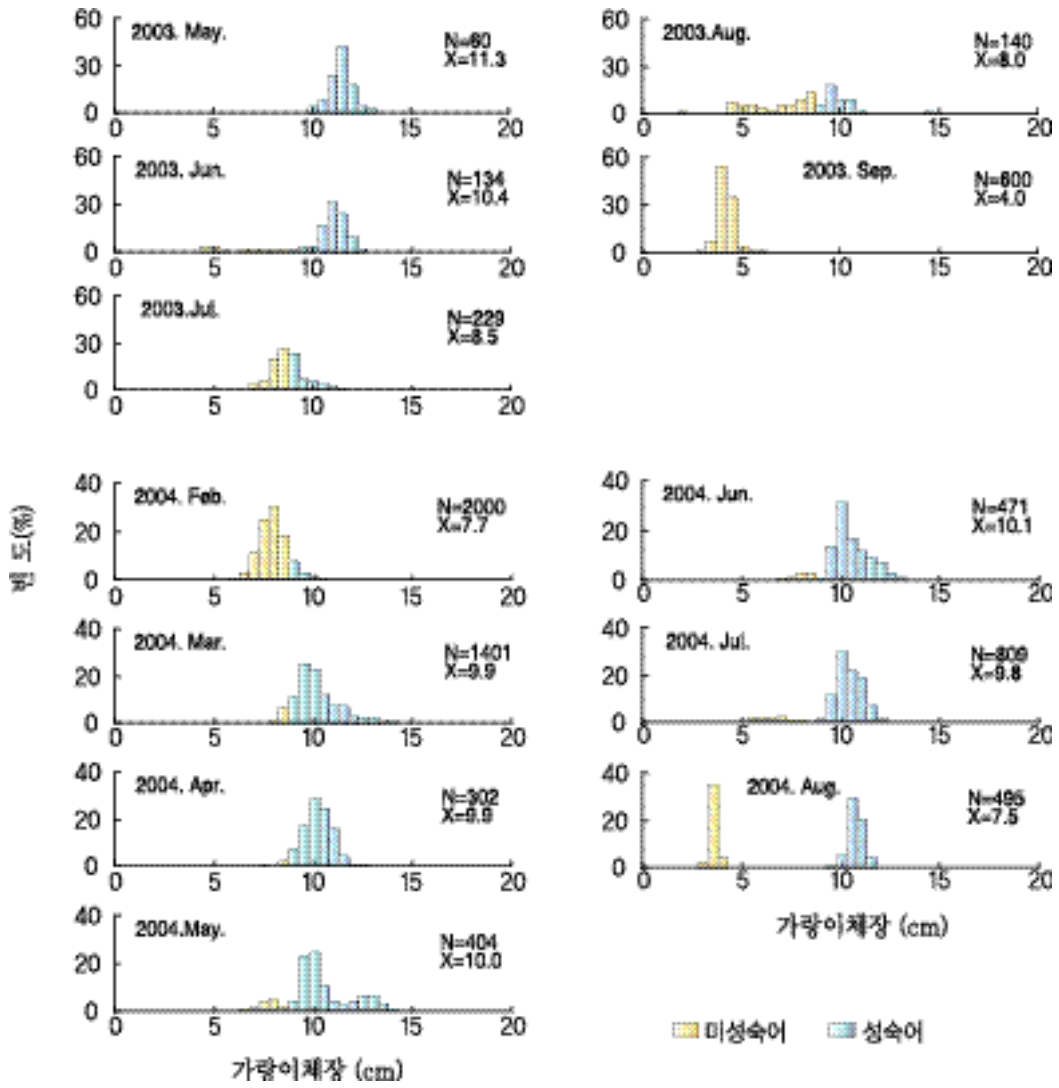


2-7.

2003 (가) 6.5cm (1,163) ,
 2004 9.0cm (5,882) . 2003
 (가 9.0cm) 44.8% , 2004 35.3%
 . 2003 7~9 , 가



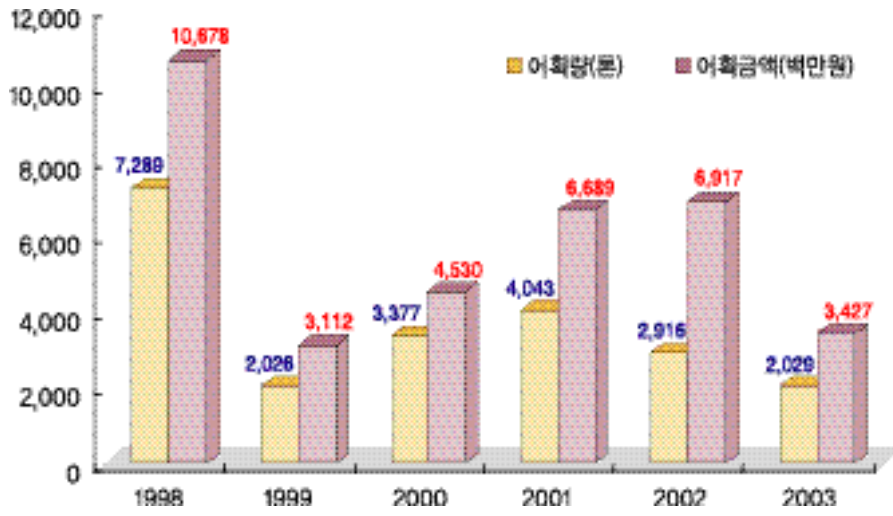
2-8.



2-9

(CPUE) 가

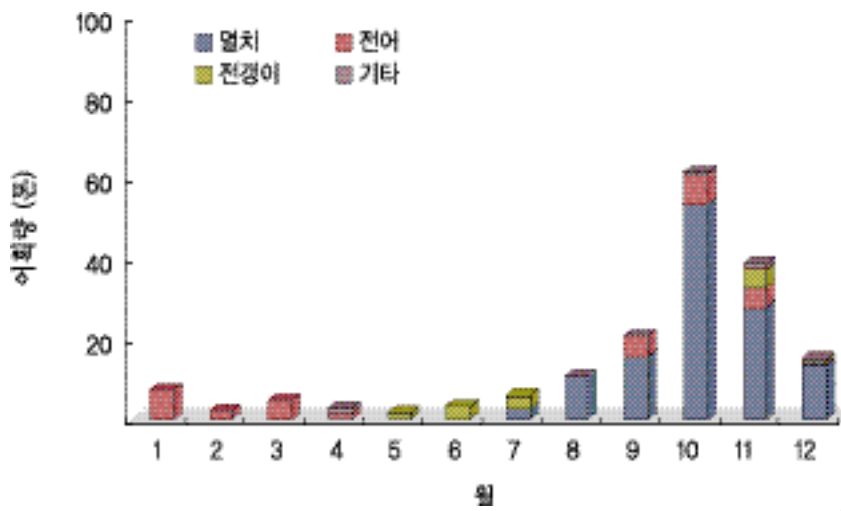
)



()

2-10.

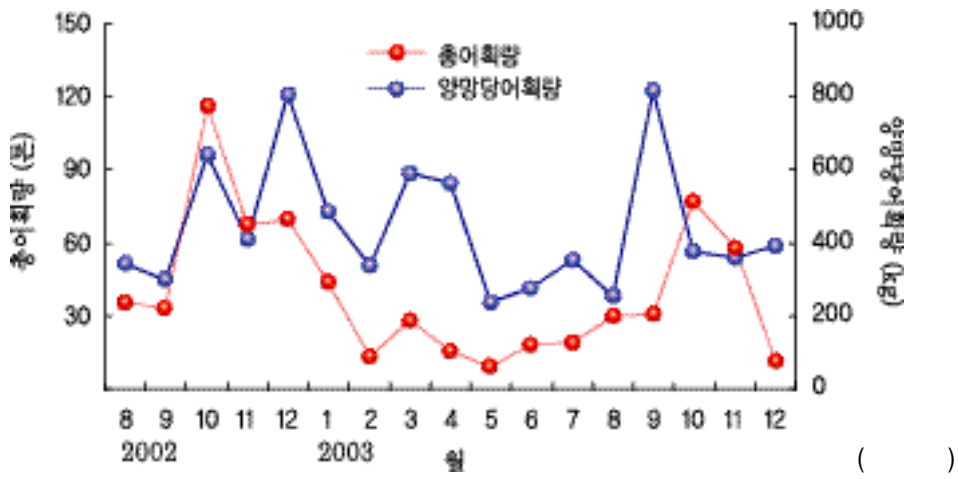
가 , 1998 7,289 , 1999 2,026 가 .



()

2-11.

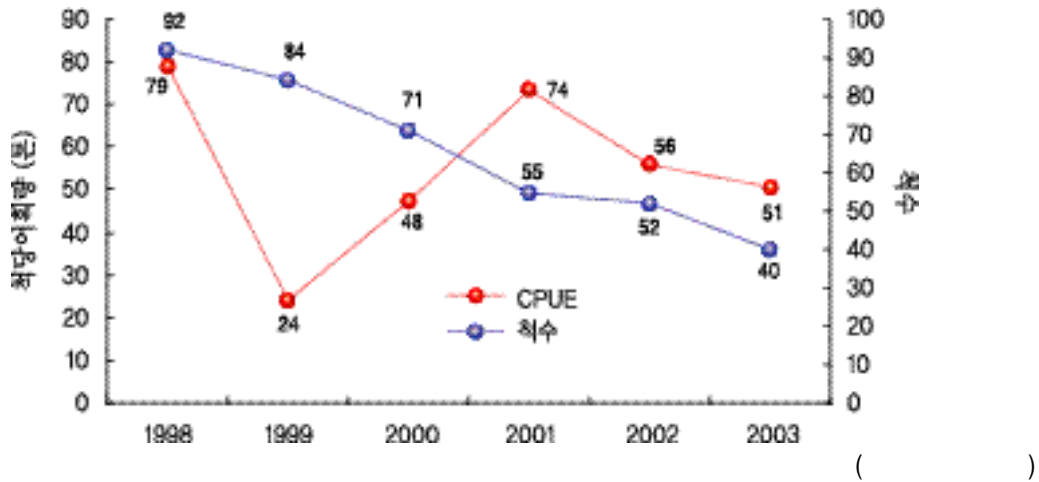
2003 가 가 10 70 가 , 4~6 가



2-12.

(CPUE)

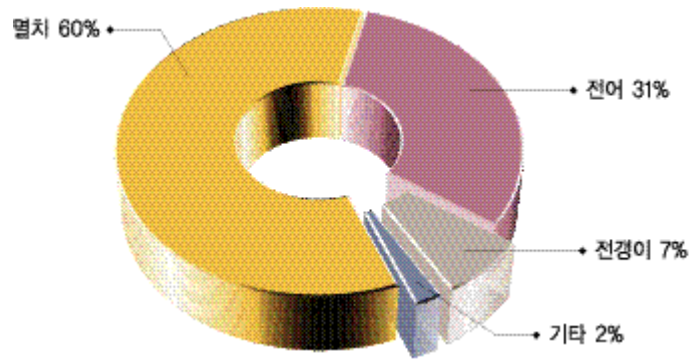
2002 0.5 , 2003 0.4
 , 2002 2003 9~10 가



2-13.

(CPUE)

1998 79 가 , 1999 가
 1998 92 2003 40



2-14.

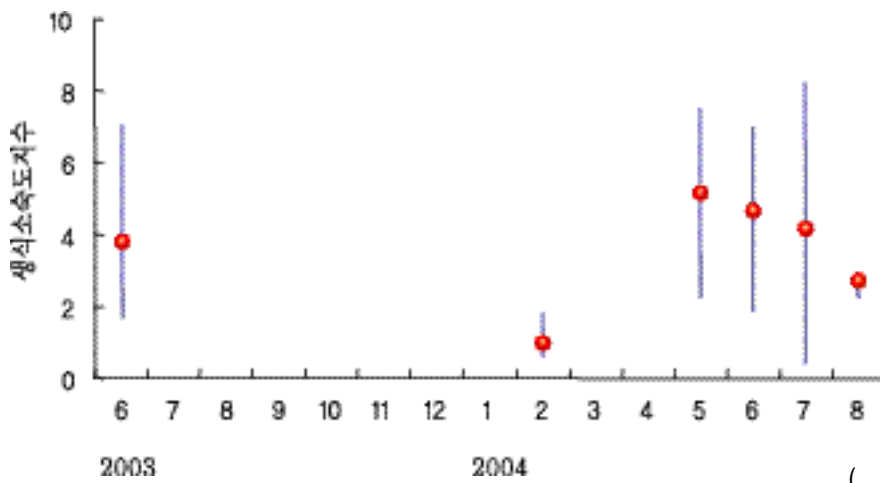
가 60% 가

50%

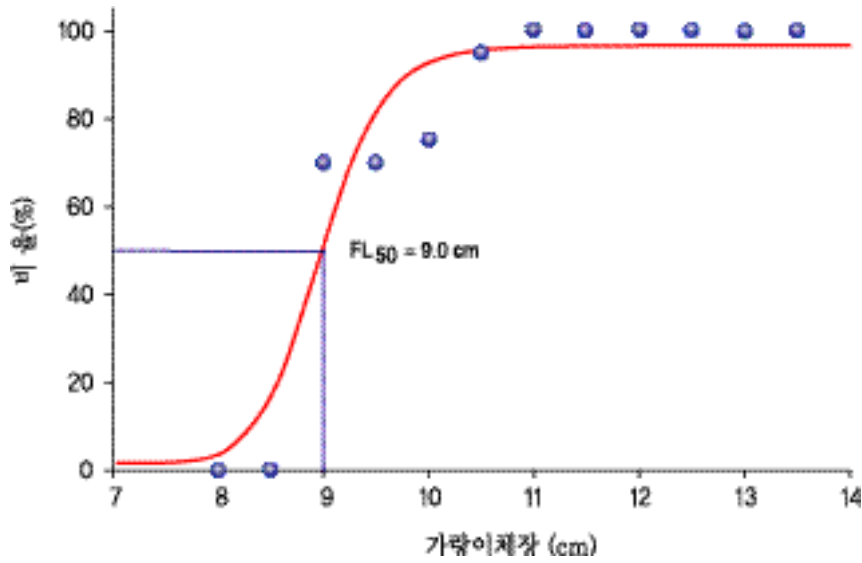
가

4~8 (Fork Length) 9.0cm

5~7

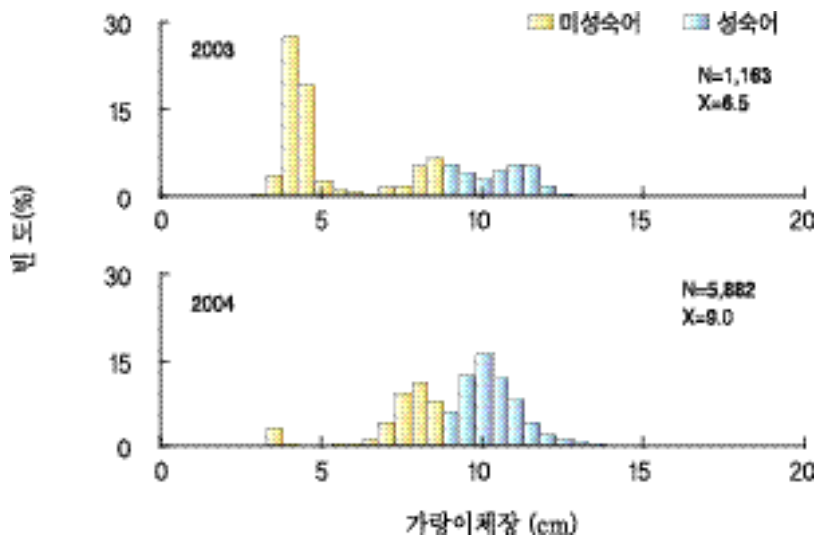


2-15.

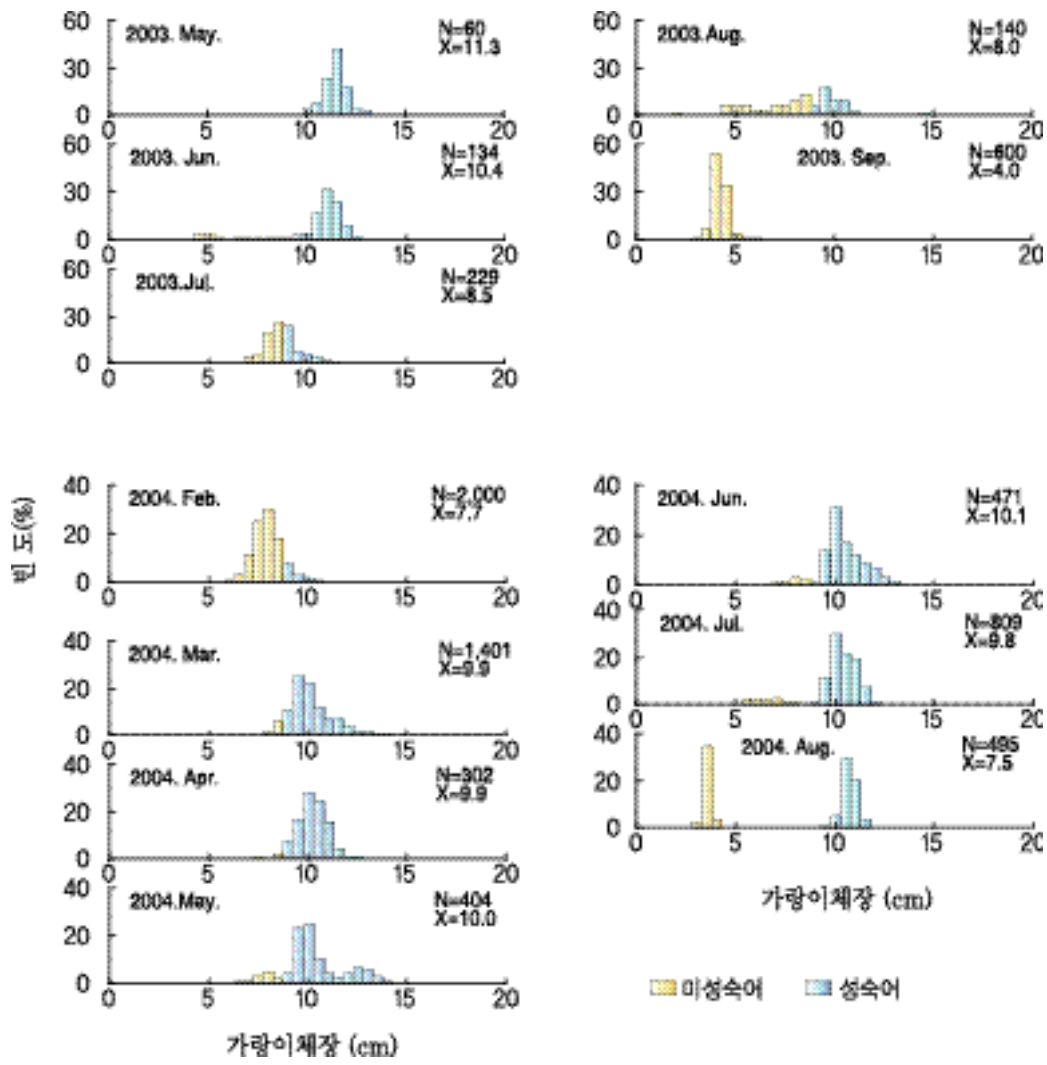


2-16.

2003 (가) 6.5cm (1,163) , 2004
 9.0cm (5,882) . 2003
 41.7% , 2004 226 25.3% .
 7~9 가 , 3~7 가

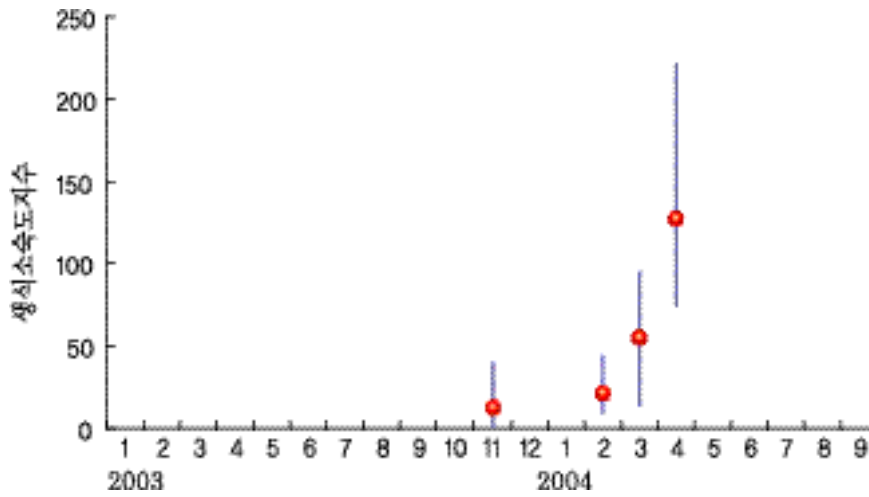


2-17.



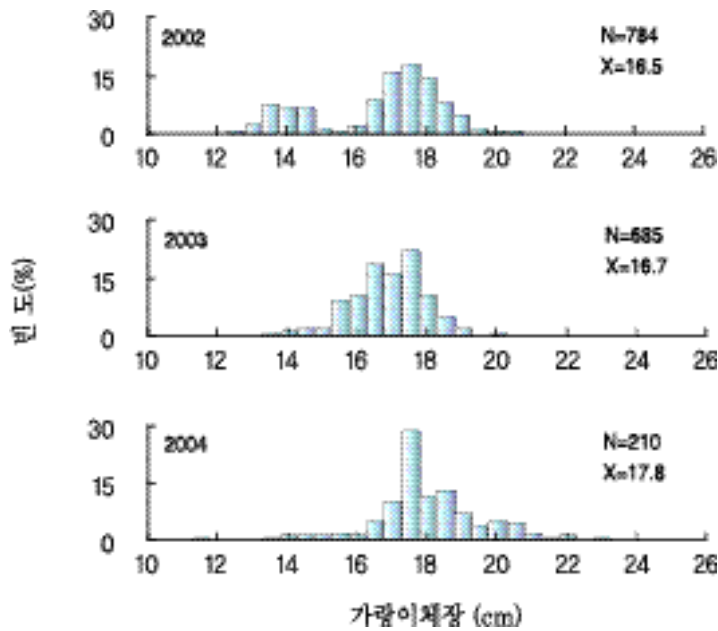
2-18.

50% 가 4~8 , 6~7
(Fork Length) 11.0cm

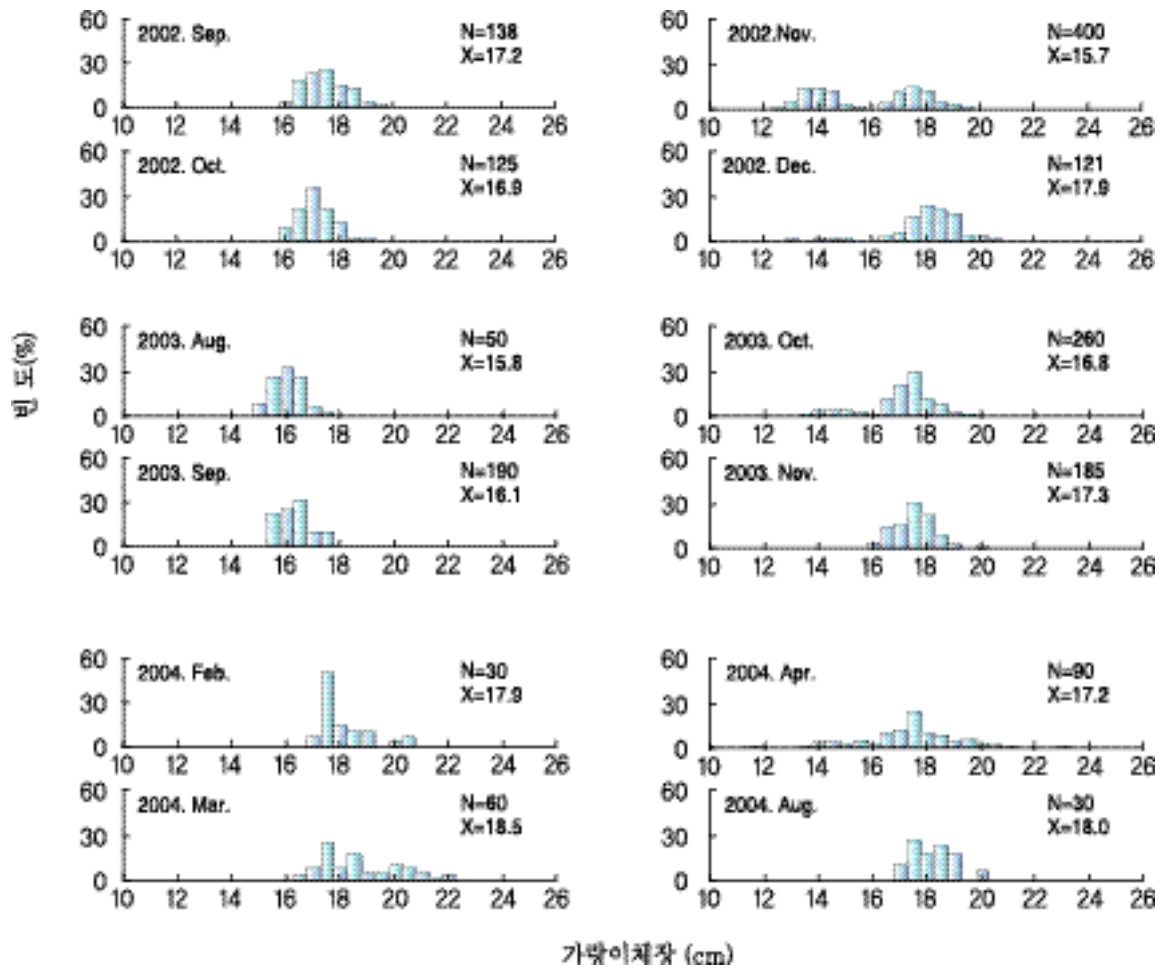


2-19.

2002 (가) 16.5cm (784) , 2003
16.7cm (685) . 2002 2003
11~12 가
, 10 가

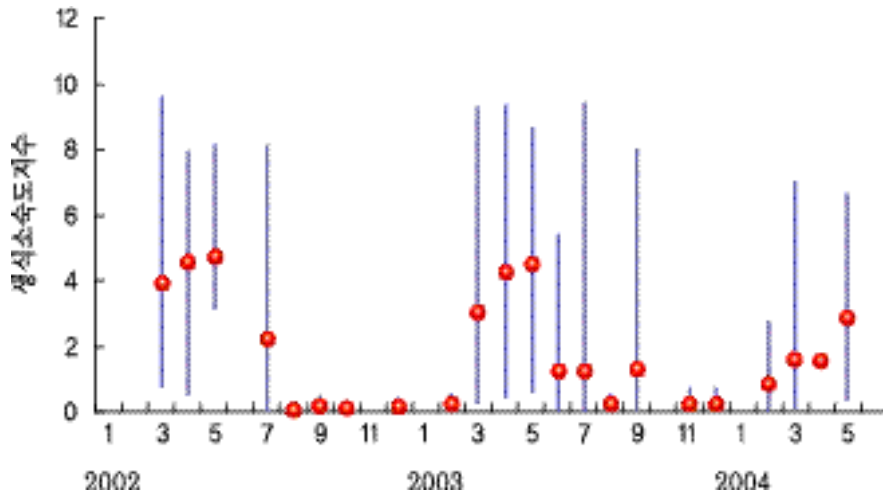


2-20.

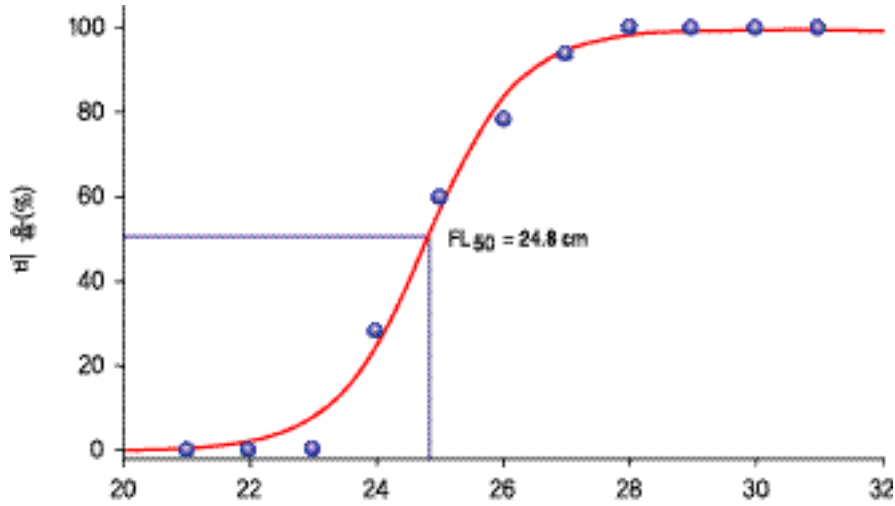


2-21.

3~7 , 3~5 ,
 627,061 (FL 40.6cm), 33,493 (FL 27.0cm) , 50%
 가 (Fork Length) 24.8cm , 2.7 .

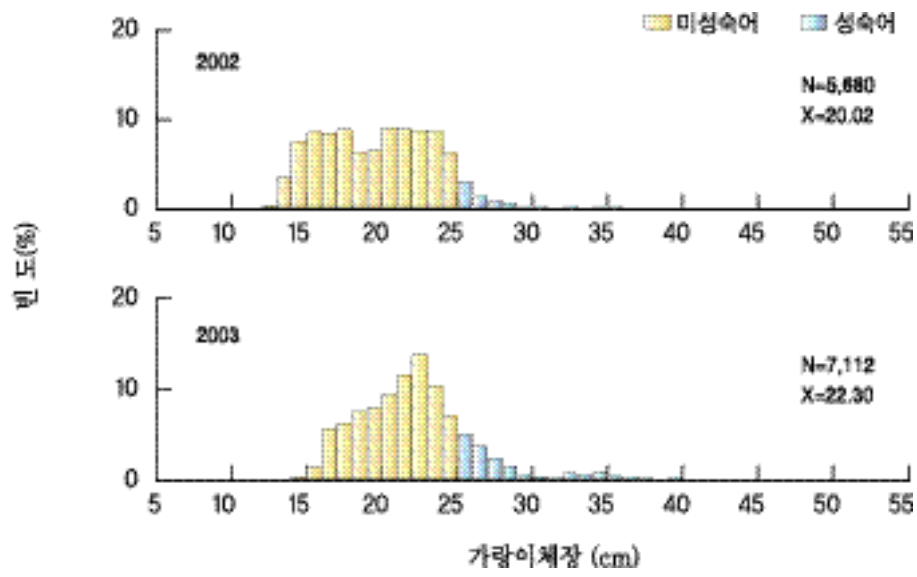


2-22.



2-23.

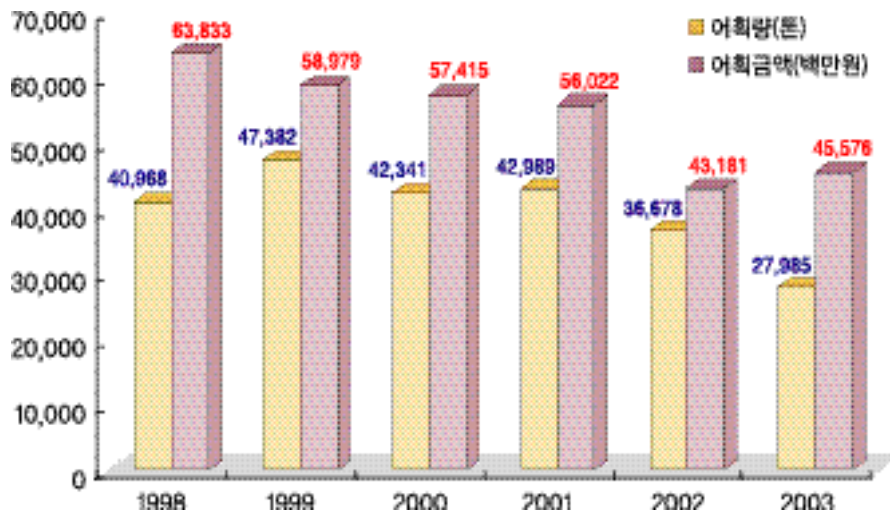
2002 가 20.02cm (5,680) ,
 2003 22.30cm (7,112) .
 5,197 91.4% , 2003 5,775 81.2%
 , 2002 2003



2-24.

(CPUE)

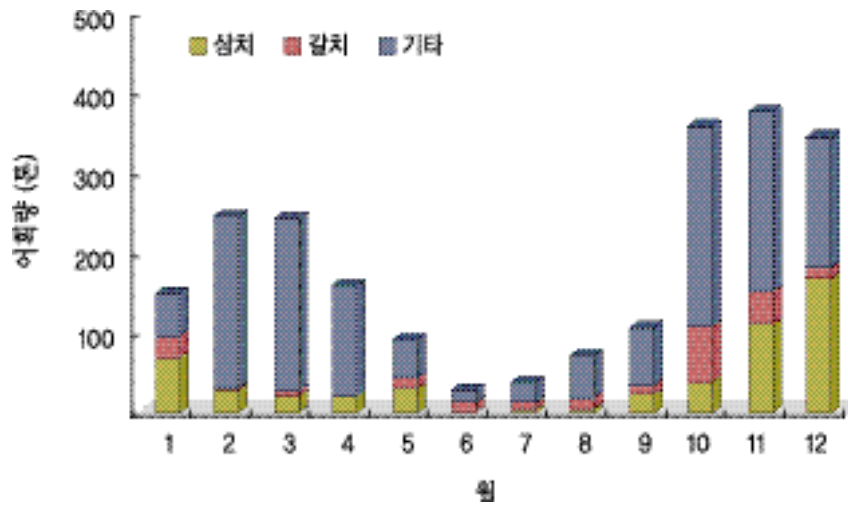
) ()



()

2-25.

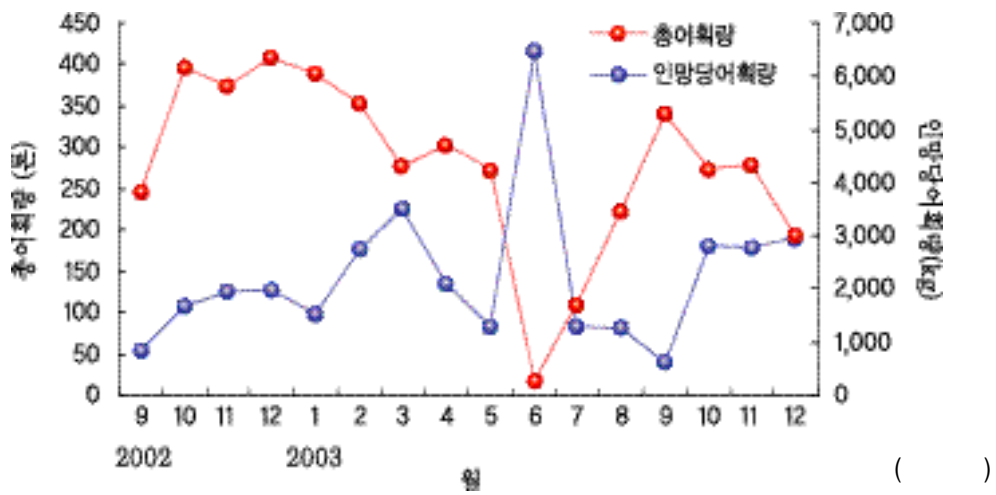
() . 1999
 47,382 가 , 2003 27,985 가 ,
 1998 가 .



()

2-26.

2003 11 400 가 , 6 가
 가 .

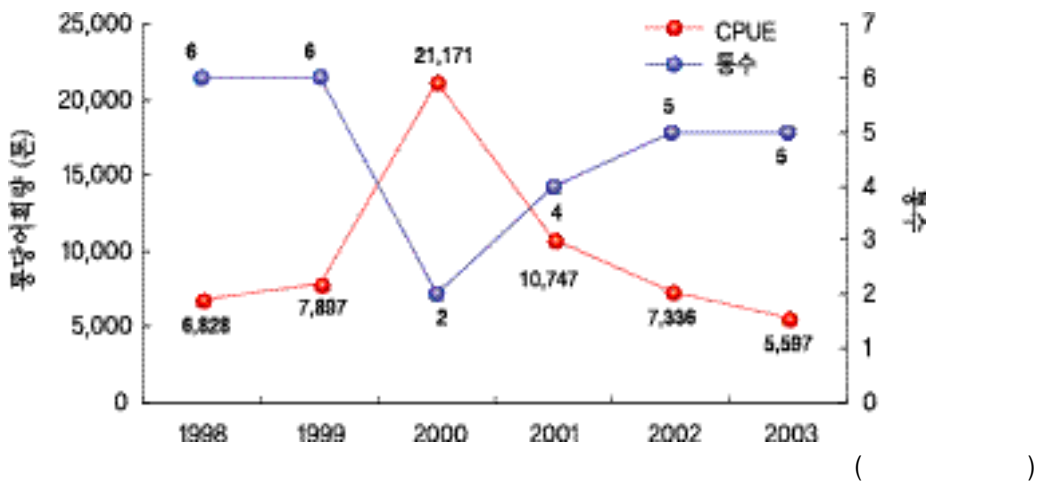


2-27.

() (CPUE)

2003 6

, 2003 6 가



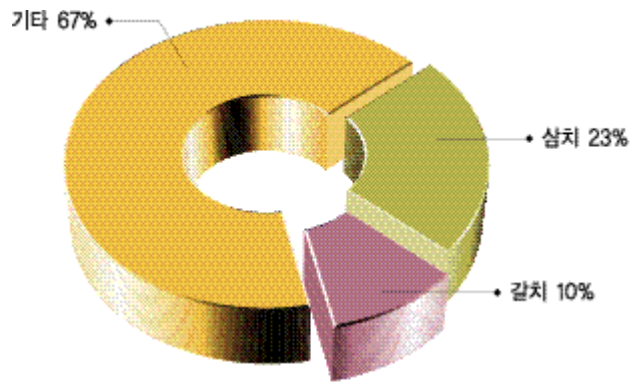
2-28.

() (CPUE)

2000 21,171 가 , 2003

5,597 가

2003 5 2000 2 가



2-29

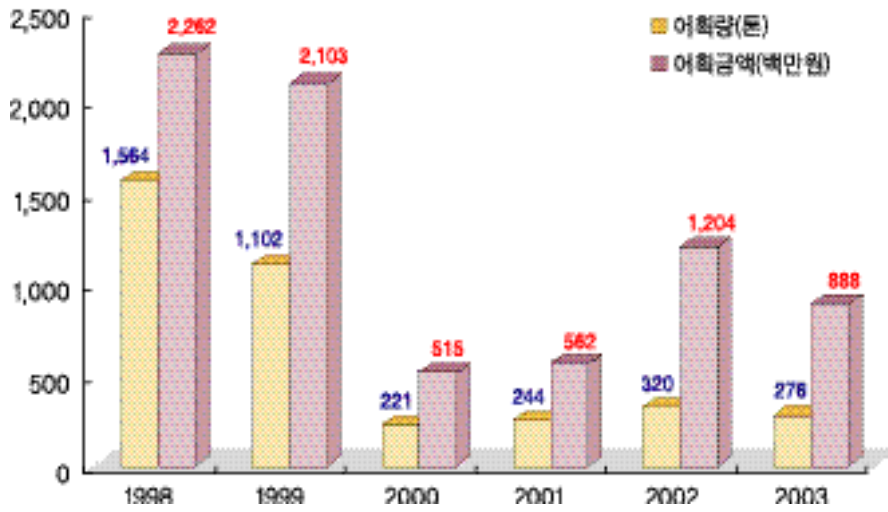
가 23% 가 , 가 10% .

()

()

(CPUE)

) ()



2-30.

()

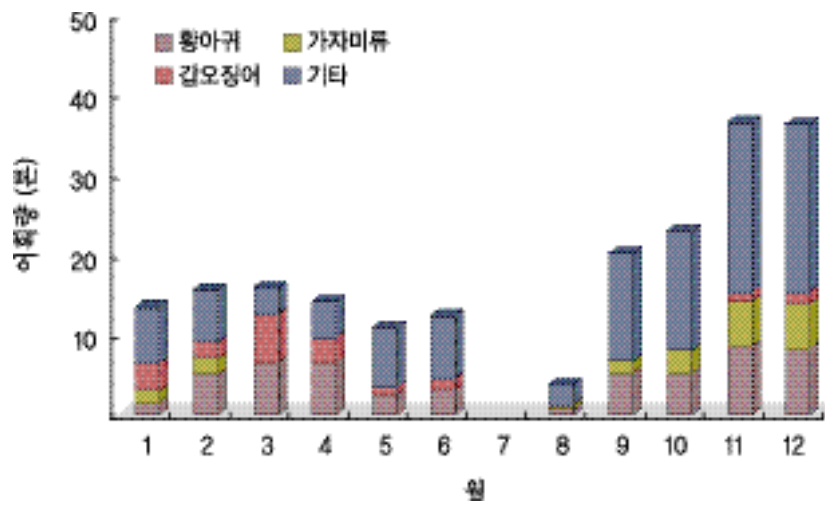
()

. 1998

1,564 가

, 2000 221 가

1998 가



2-31.

()

2003

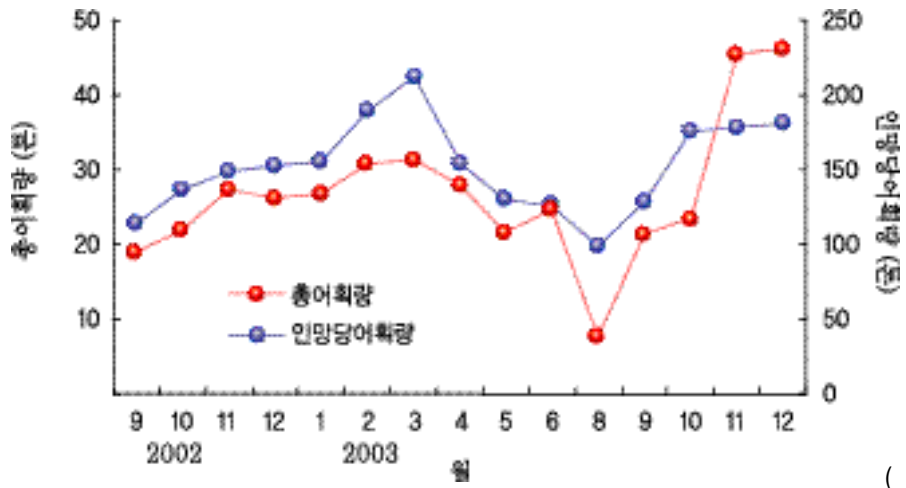
11~12

40

가

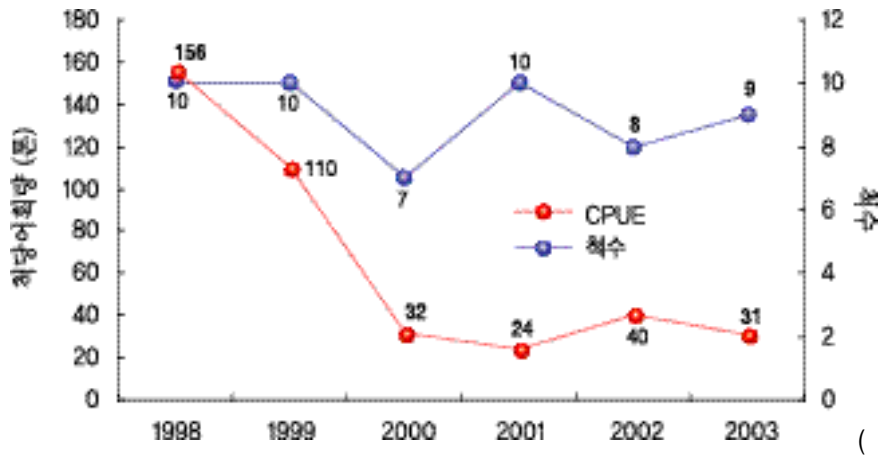
, 7

가 가



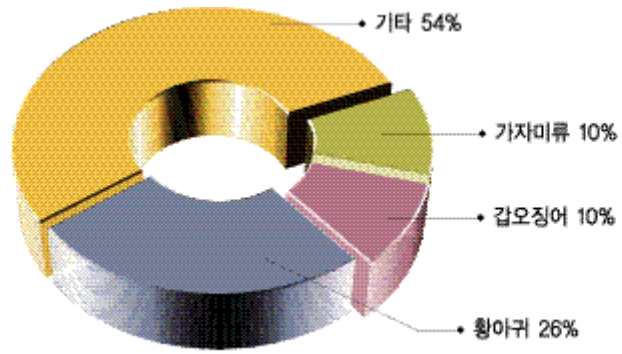
2-32.

() (CPUE)
 2002 가 , 2003 3
 가



2-33.

() (CPUE)
 1998 156 가 , 2003
 2003 9 가

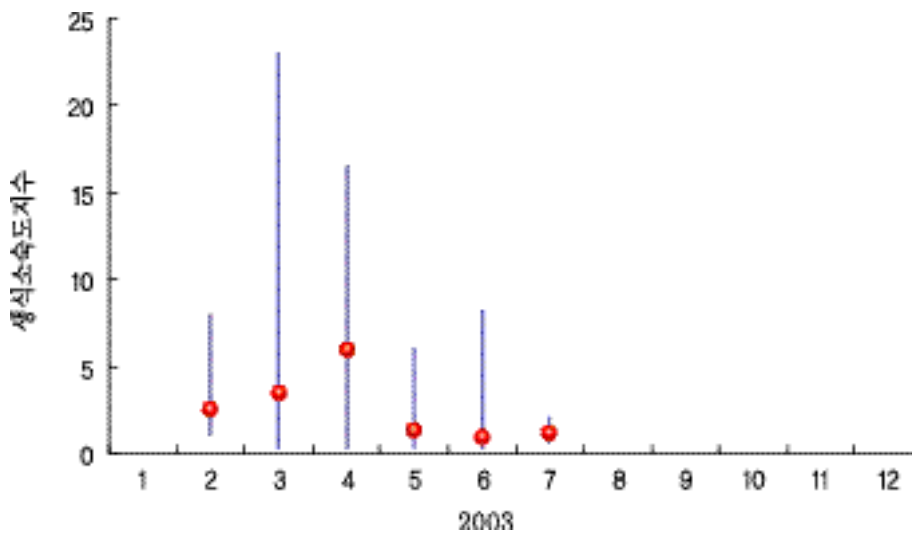


2-34.

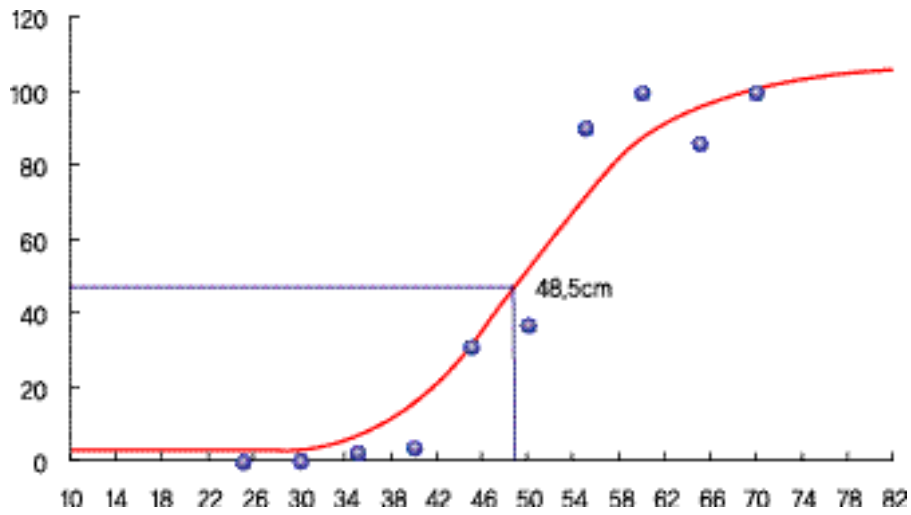
가 26% 가 , 가 가 10%

() , , 가 .

1~5 , 2~4 , 1,874,560
 , 369,570 , 50% (Total Length) 48.5cm
 , 3.5 .

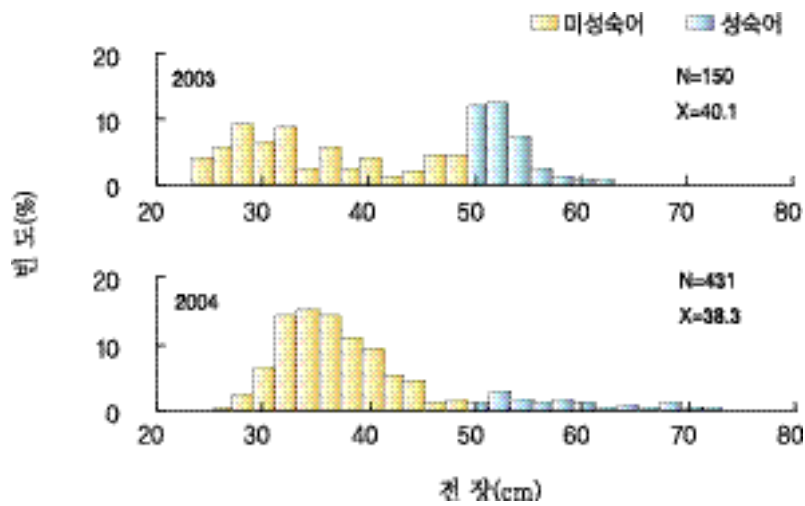


2-35.

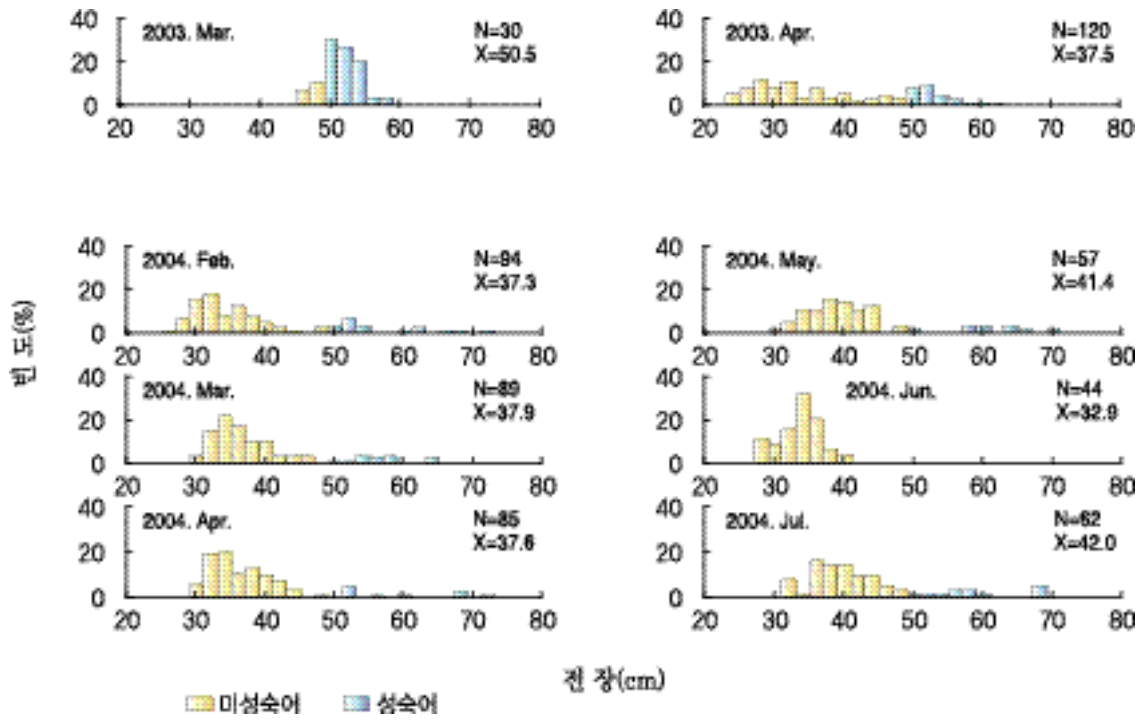


2-36.

2003 () 40.1cm (150) , 2004
 38.3cm (431) . 2003
 (48.5cm) 63.2% , 2004 73.3% .
 2003 2~7 .



2-37.

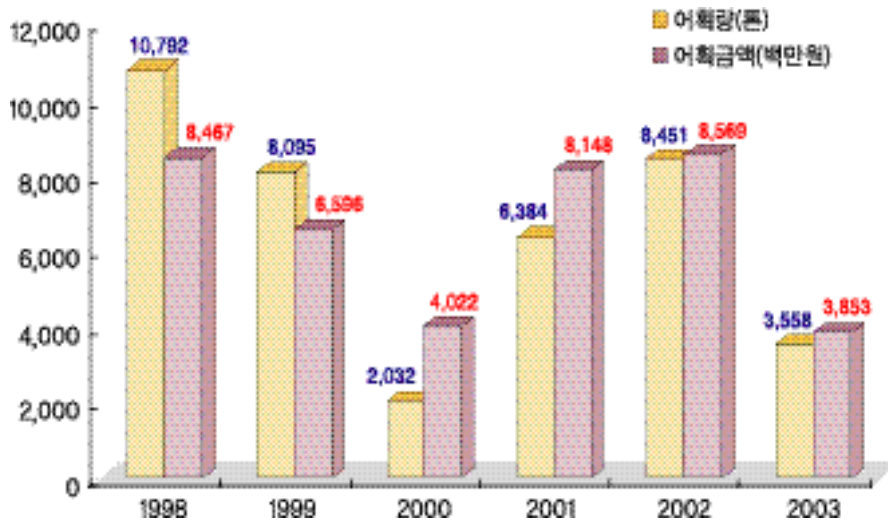


2-38.

()

(CPUE)

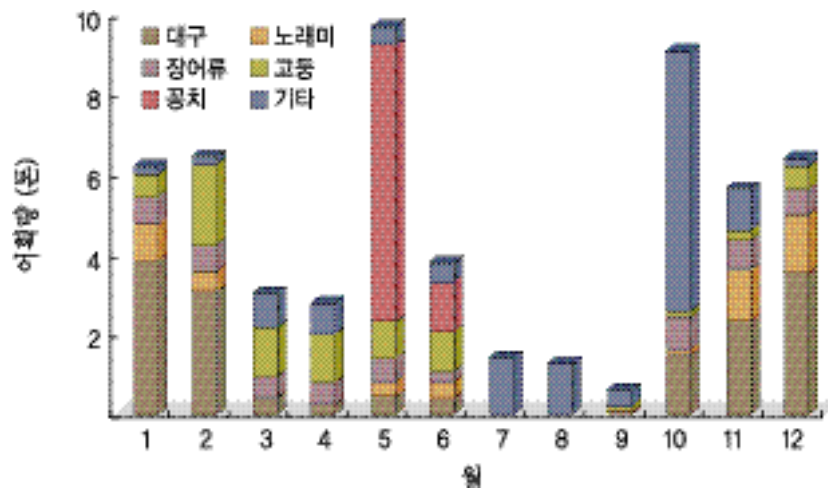
)



2-39.

()

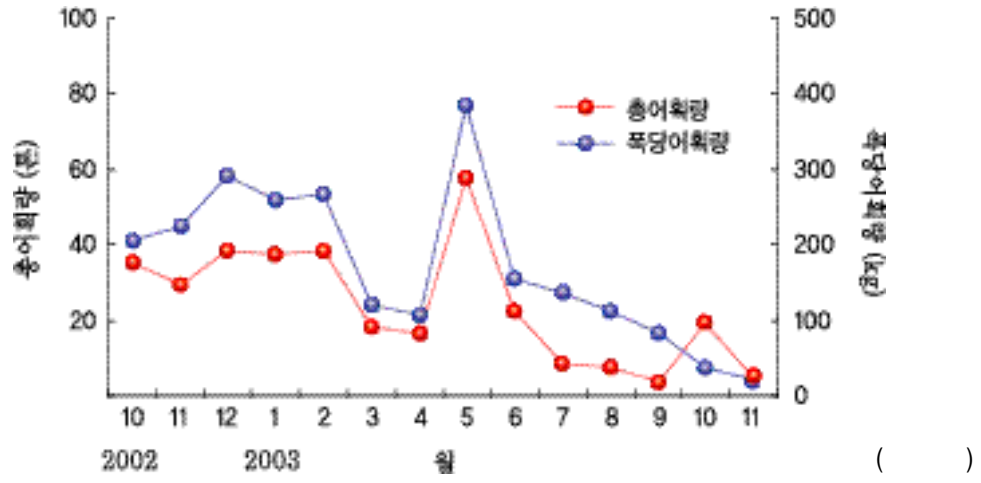
가 , 2000 2,032 가 , 1998 10,792 2002 가



2-40.

()

2003 5 10 가 , 9 가

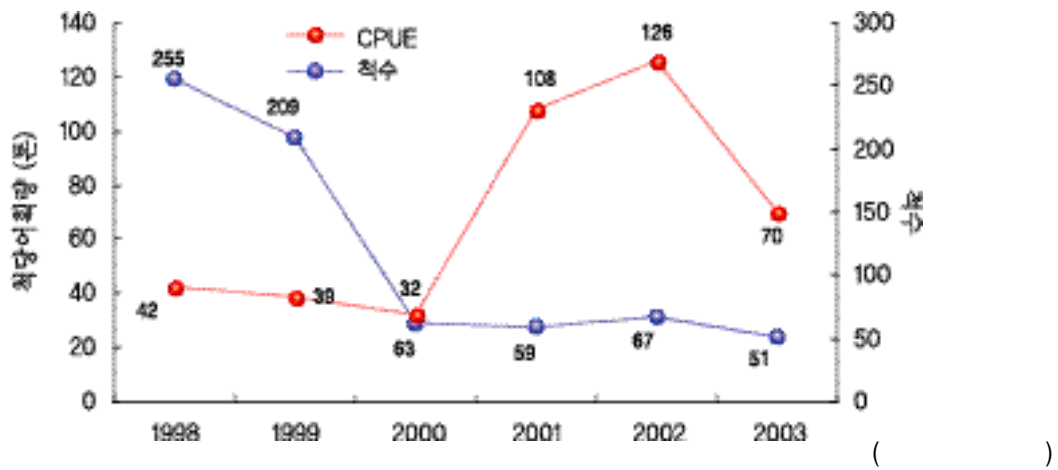


2-41.

(CPUE)

2003 5
 , 2003 5

가

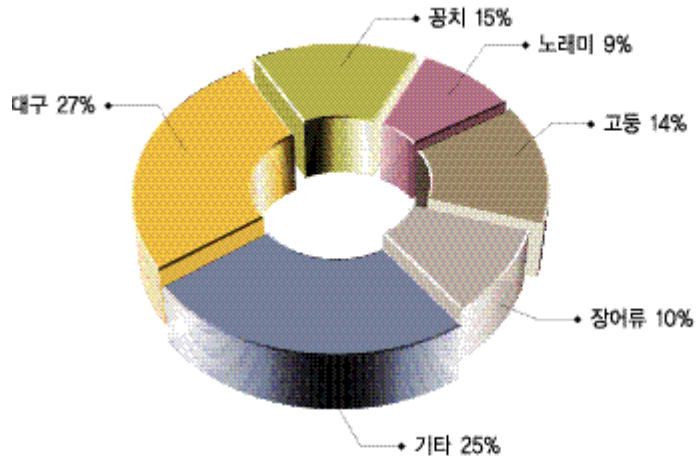


2-42.

(CPUE)

2002 126 가 , 2003 70
 2003 51

, 가 27% 가 , , ,

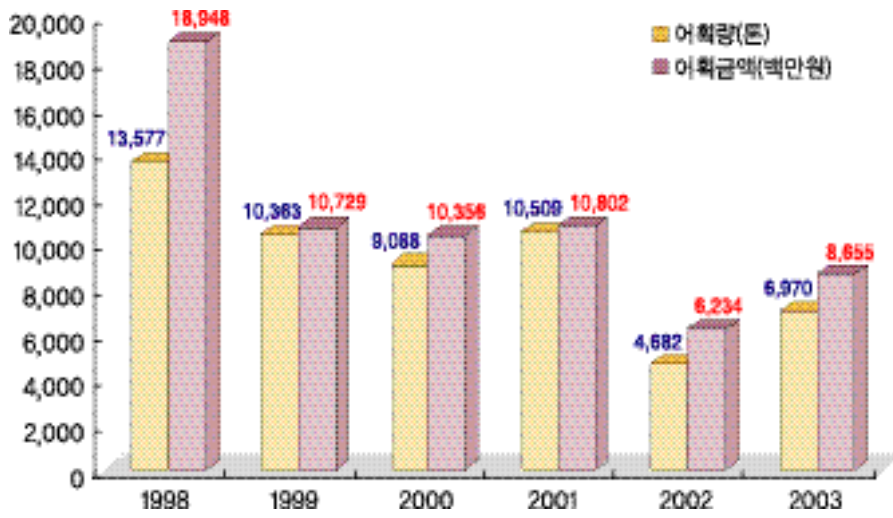


2-43.

, , , ,

(CPUE) 2002

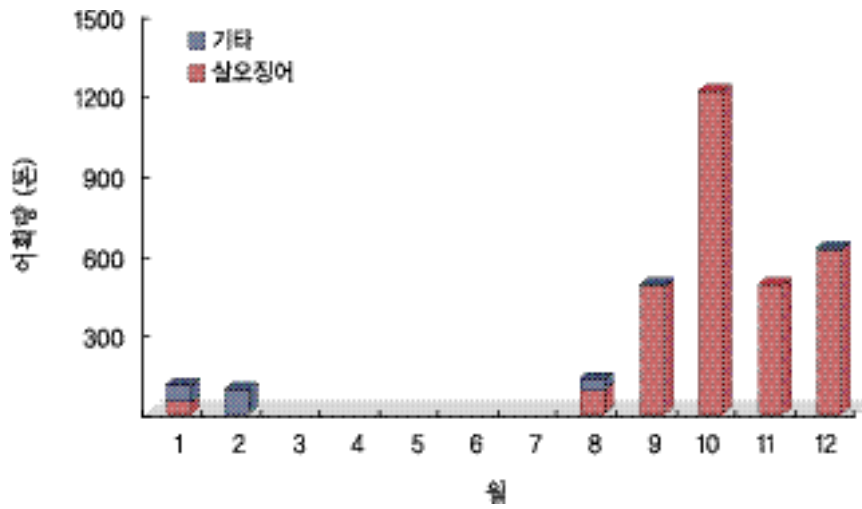
)



2-44.

()

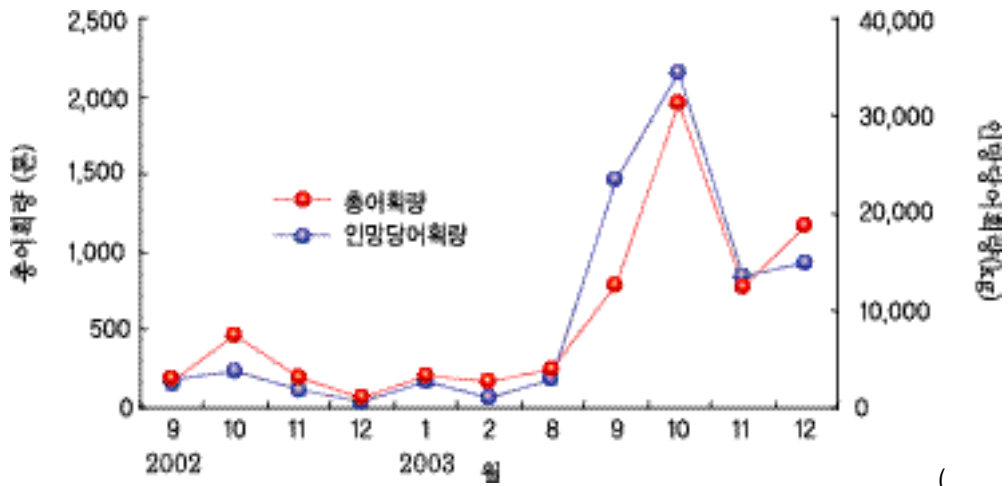
가 , 2002 4,682 가 , 1998 13,577 가 , 1998 가



2-45.

()

가 2003 10 1,300 가 , 1~2 가 , 3~7 가



2-46.

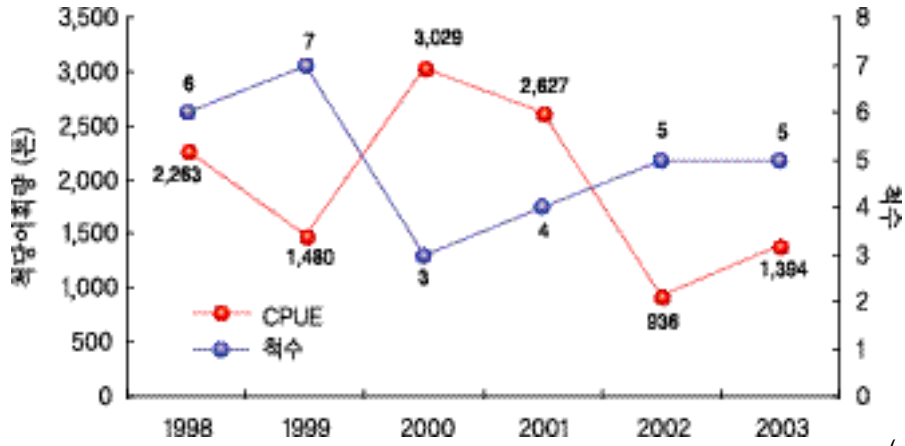
(CPUE)

2003
가

가

. 2002

, 2003 10



2-47.

(CPUE)

가

2000

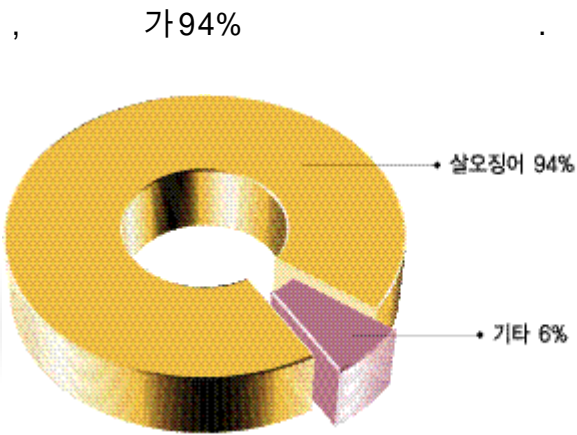
3,029

가

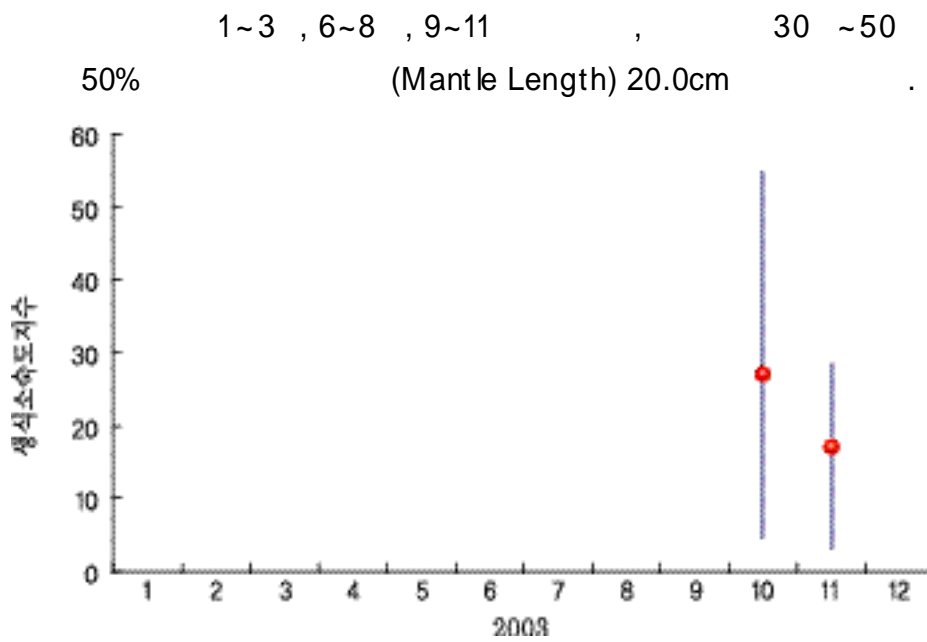
, 2002

936

2003 5

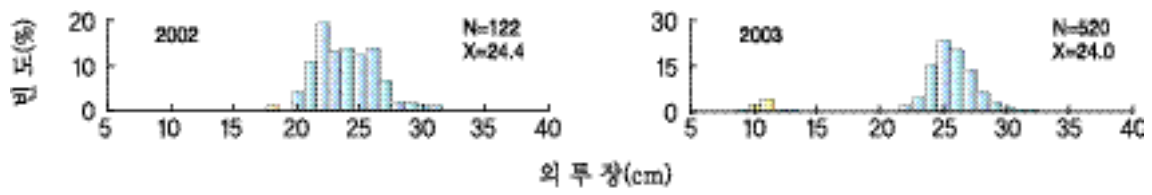


2-48.

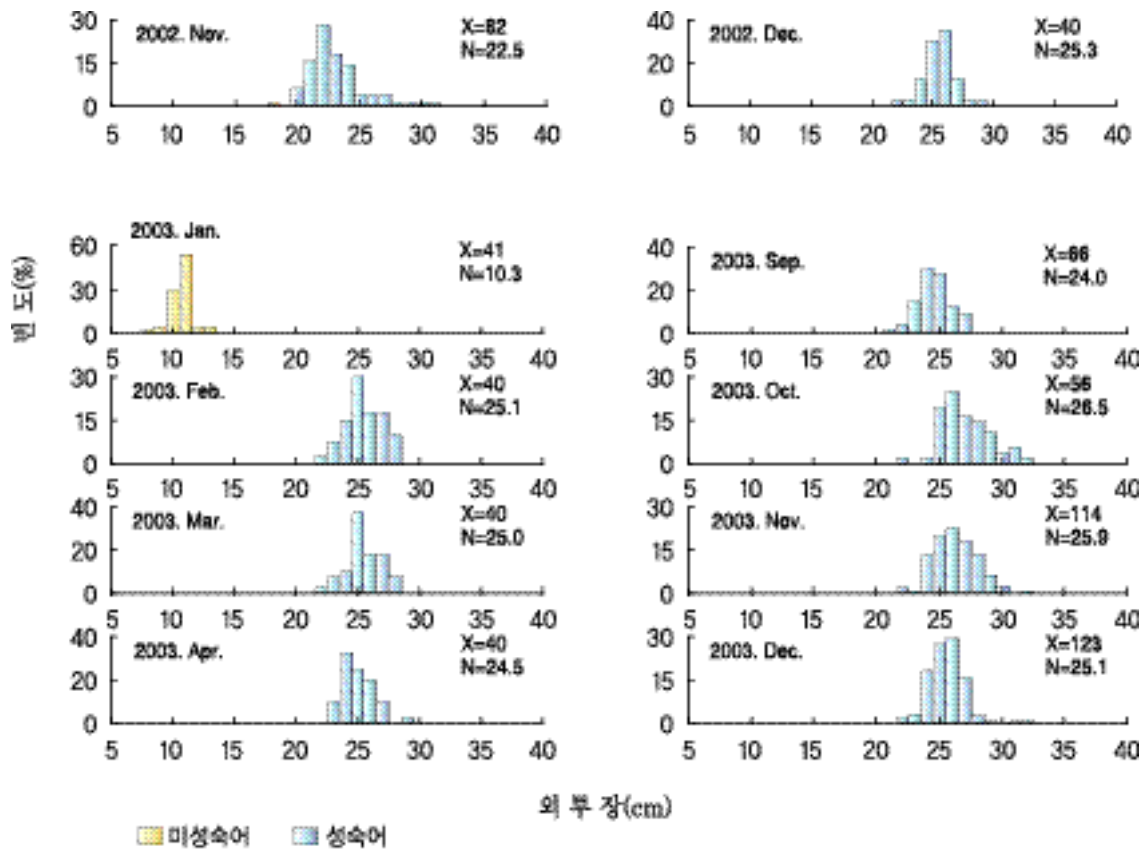


2-49.

2002 () 24.4cm (122) ,
 2003 24.0cm (520) . 2002
 (20.0cm) 3.5% , 2003 10.1%
 2003 1 ,
 가 .



2-50.

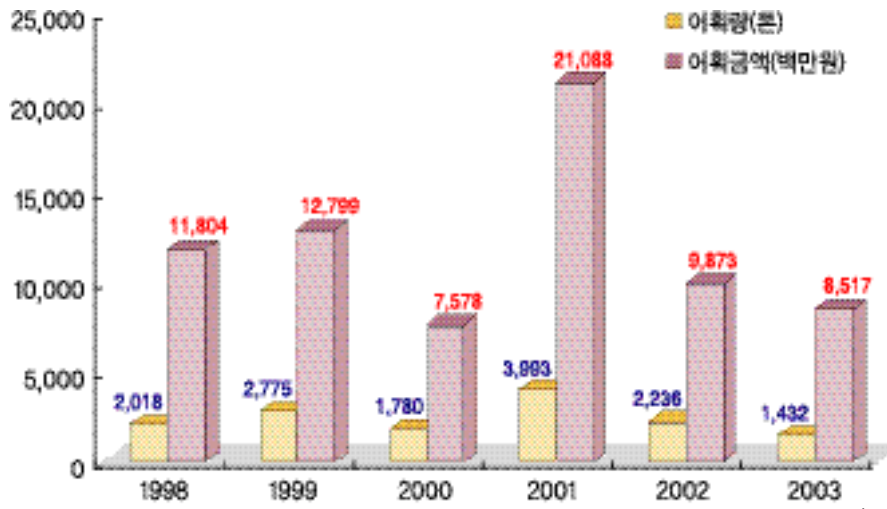


2-51.

(CPUE) 2002

가

)



2-52.

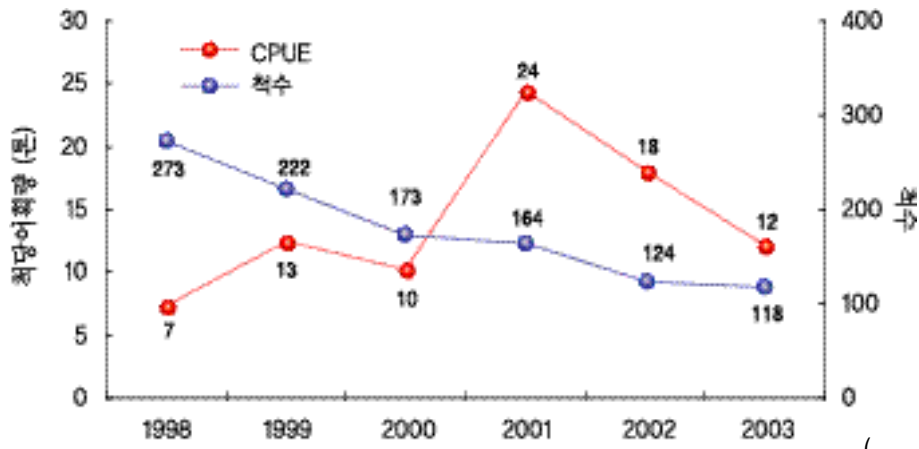
가

, 2003 1,432

가

. 2001 3,993

, 2001 가



2-53.

(CPUE)

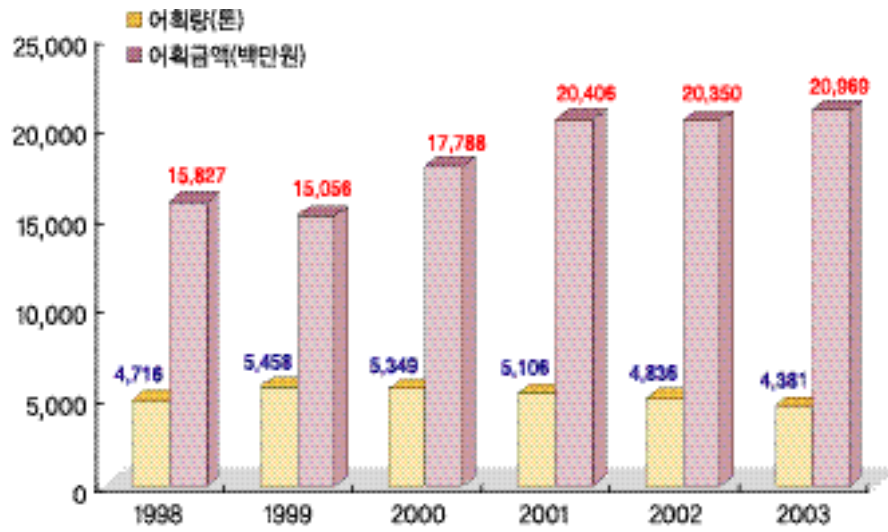
2001 24 가

, 1998 7 가

2003 118

CPUE

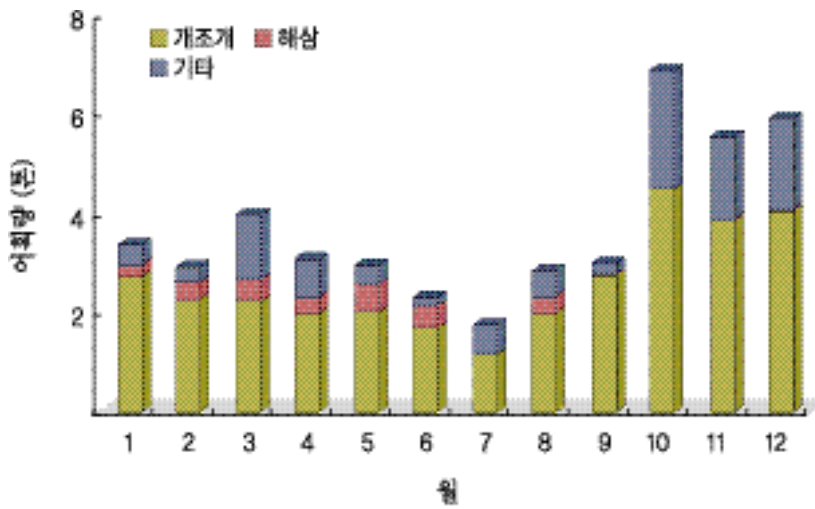
)



2-54.

()

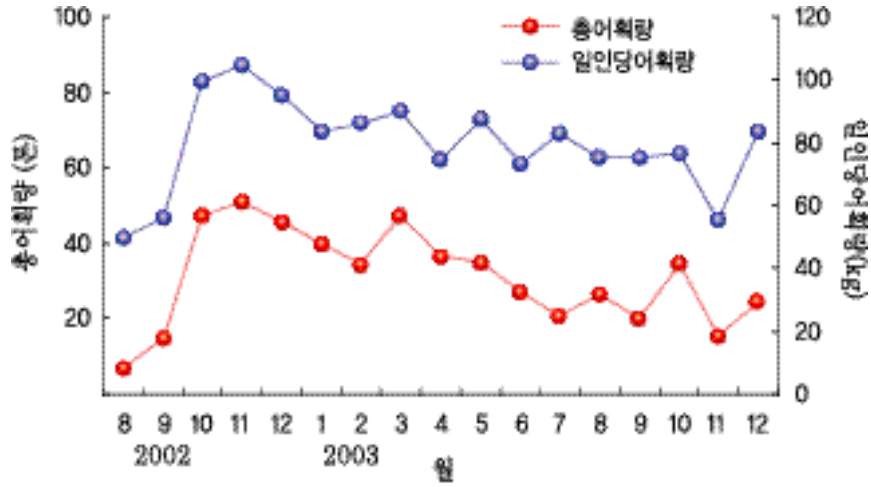
. 1999 5,458 가
 , 2003 4,381 가 , 2003 가



2-55.

()

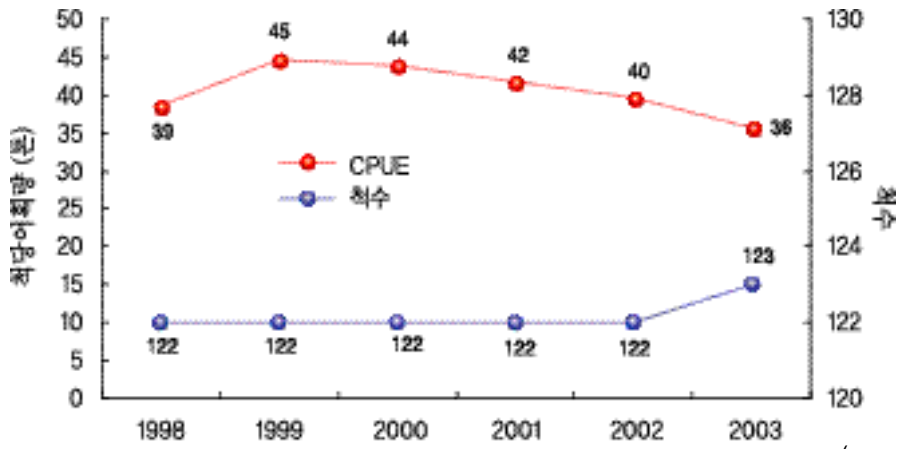
2003 10 7 가 , 7 2
 가 가 .



2-56.

(CPUE)

2003
2002 11 가

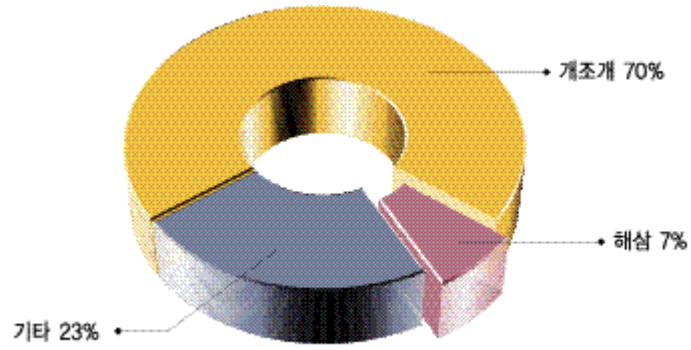


2-57.

(CPUE)

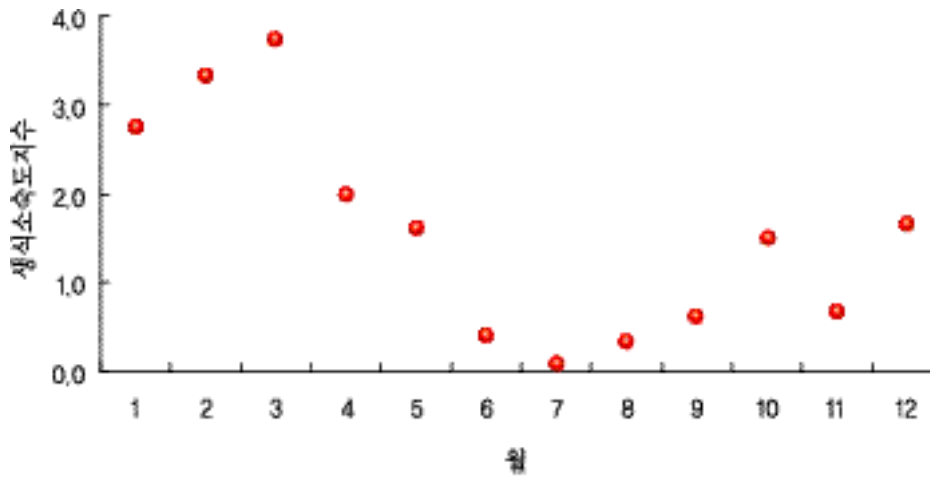
1999 45 가 , 2003 36 가
2003 123 가

가 70% , 7%

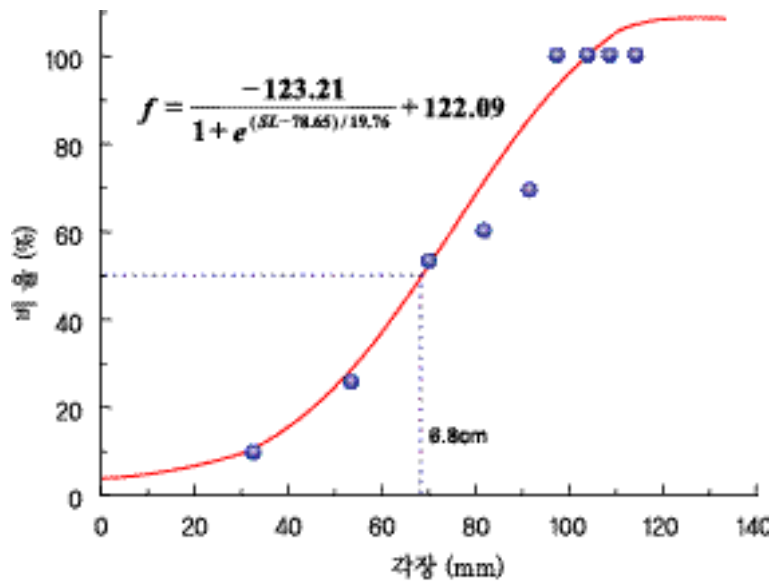


2-58.

5~10 , 6~7 . 50%
(Shell Length) 6.8cm , 5

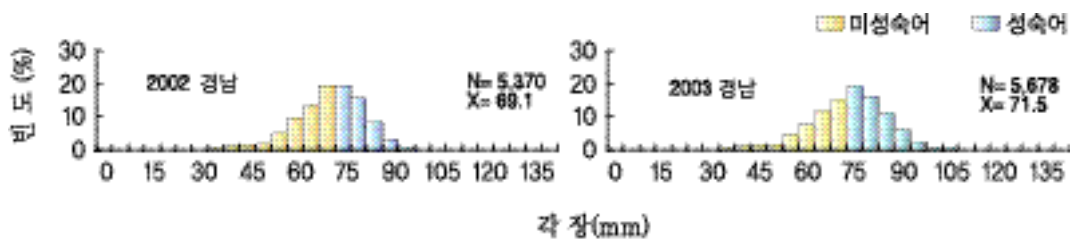


2-59.

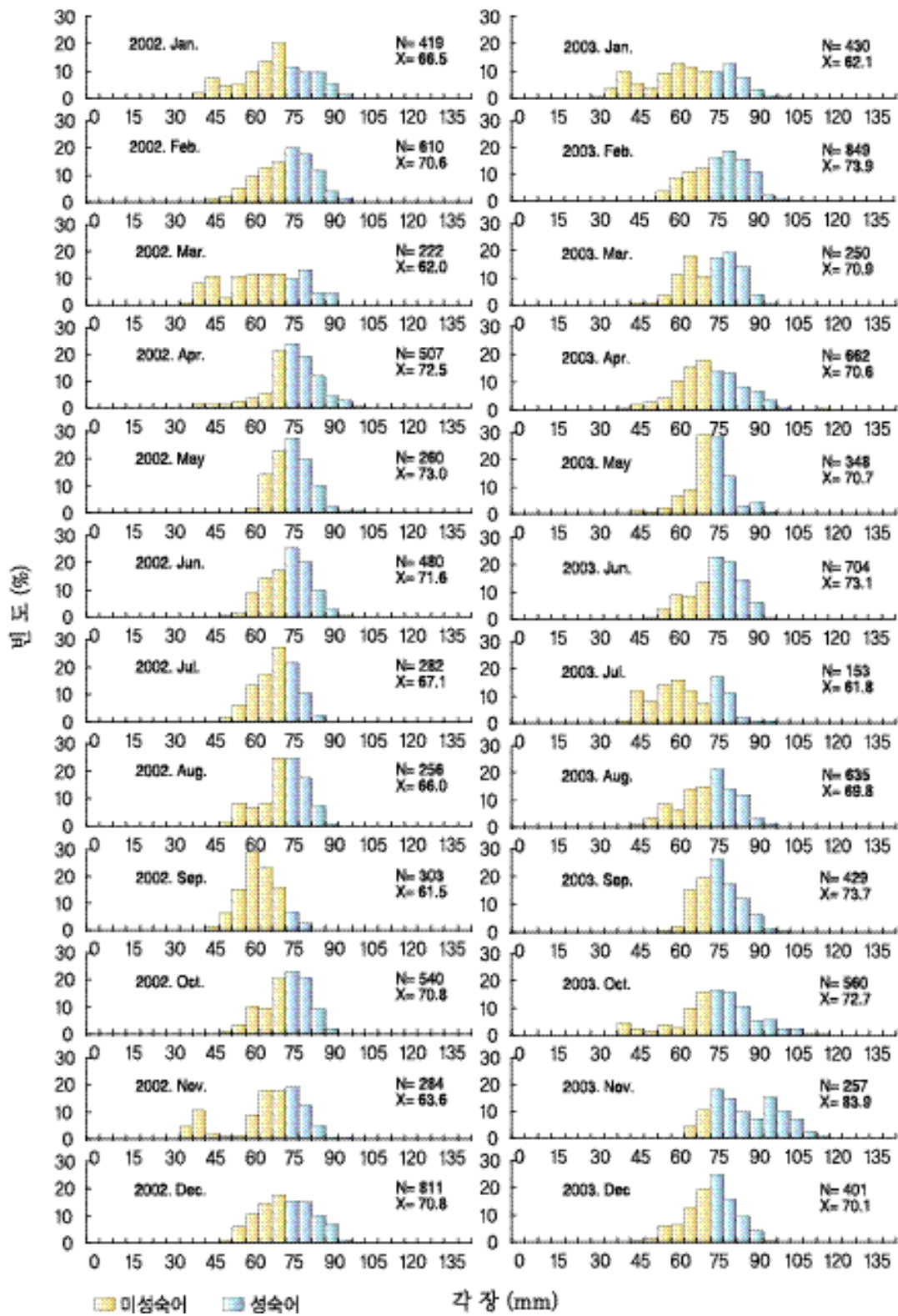


2-60.

2002 () 6.9cm (5,370) ,
 2003 7.1cm (5,678) . 2003
 (6.8cm) 44.8% , 2004 42.3% .
 2002 1~3 .



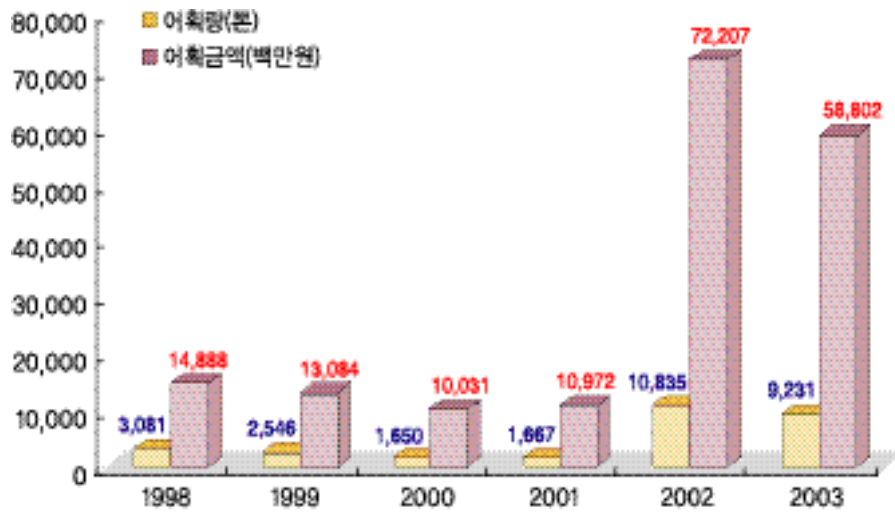
2-61.



2-62.

(CPUE)

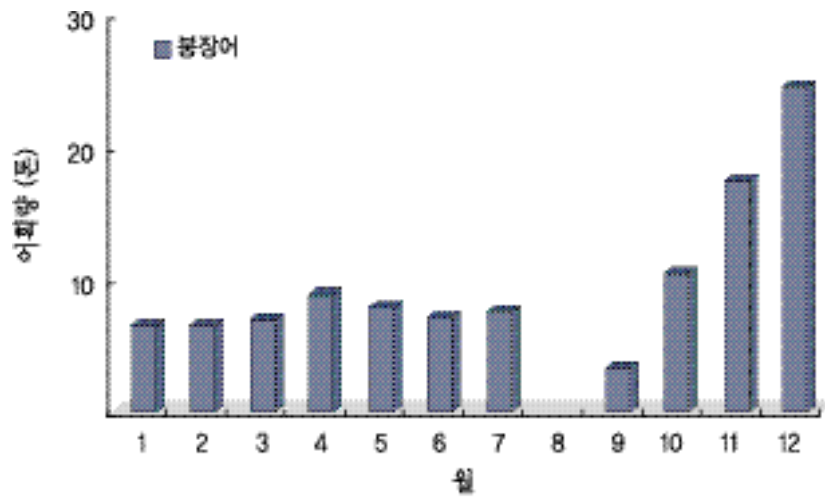
) ()



2-63.

()

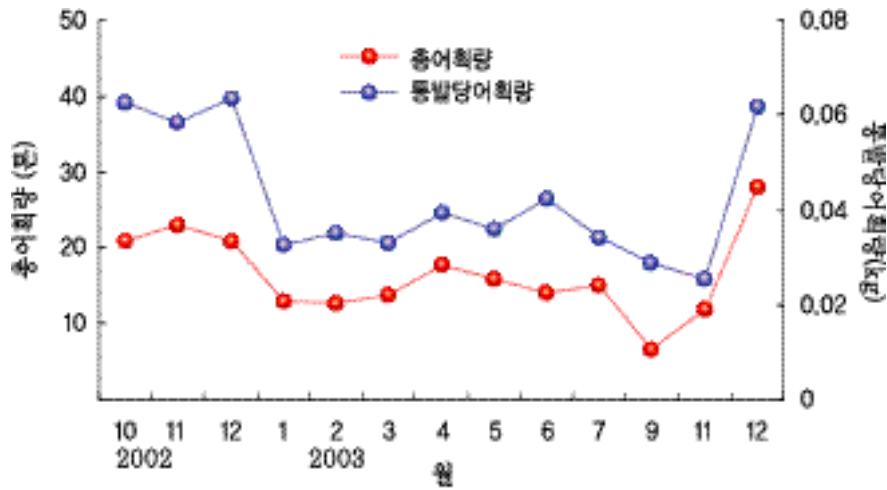
가 , 1998~2001 . 2002 10,835
 2002~2003 가 .



2-64.

()

2003 12 27 가 , 8
 가 .



2-65.

(CPUE)

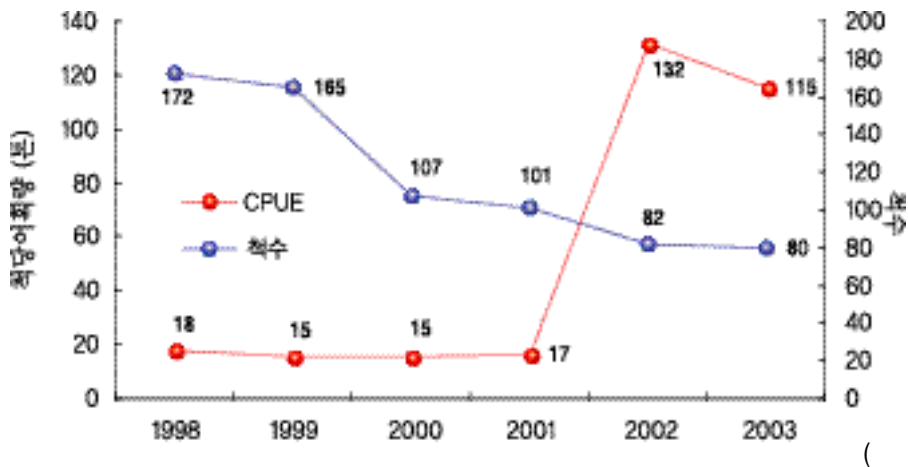
. 2003

2002

, 2002 12 가

, 가 2003 12

가



2-66.

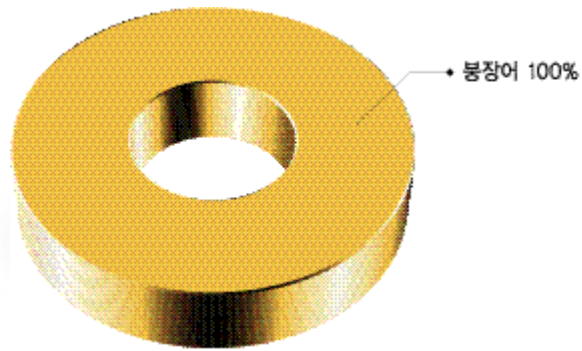
(CPUE)

2002 132 가

, 1998~2001

2003 80

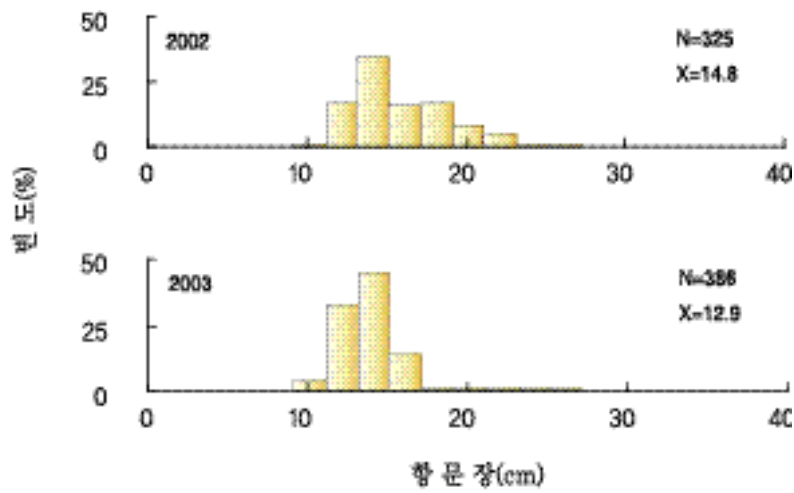
가100%



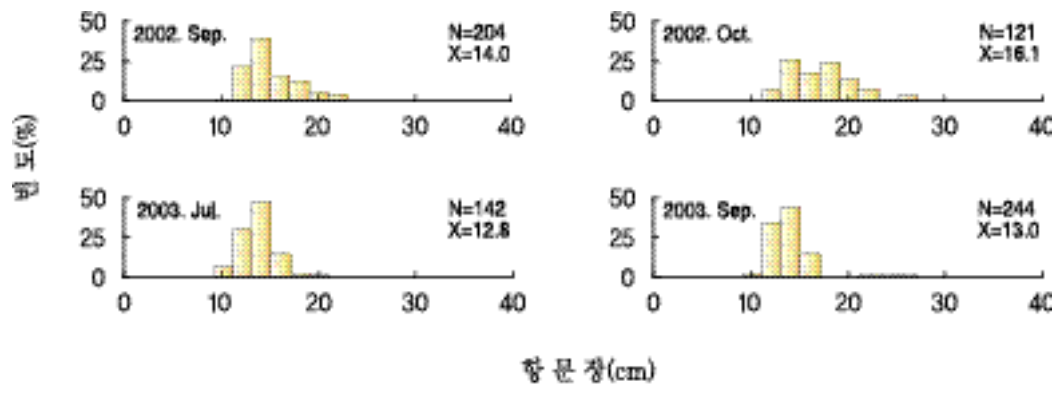
2-67.

()

4~6 , 50% (Anal Length)
 50.0cm , 3~4
 2002 () 14.8cm (325) ,
 2003 12.9cm (386) . 2002 2003



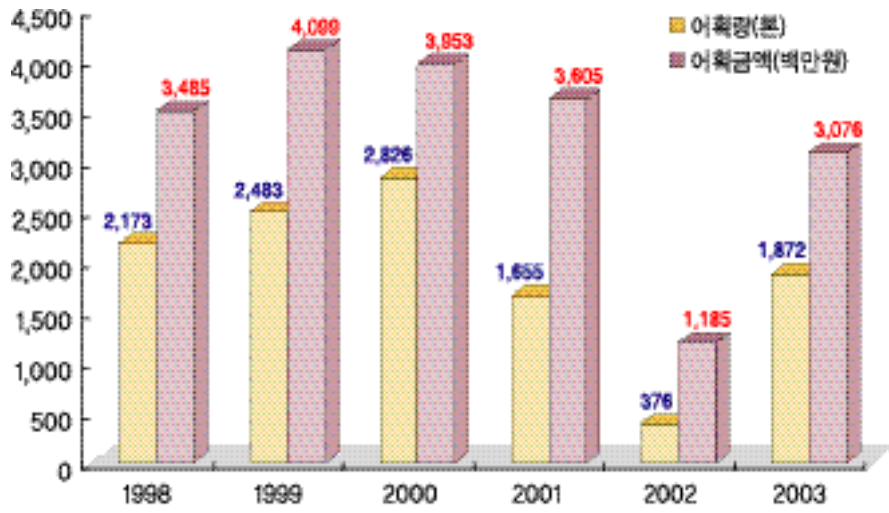
2-68.



2-69.

(CPUE) 가

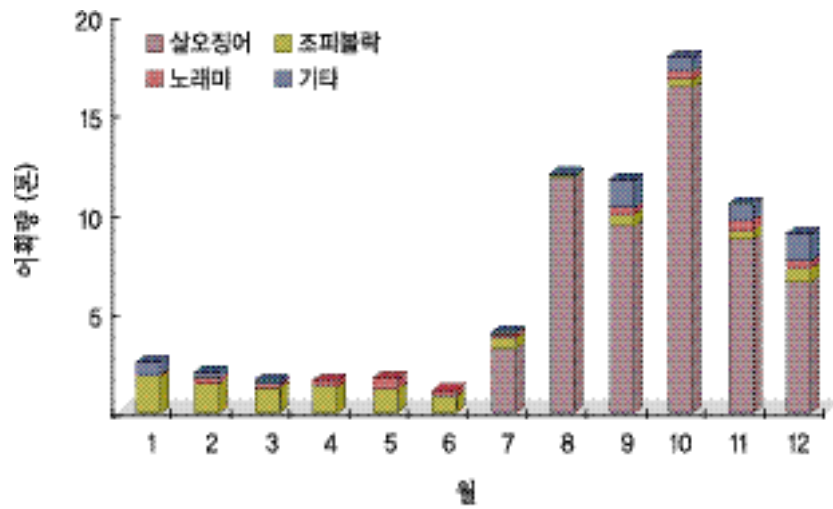
)



2-70.

()

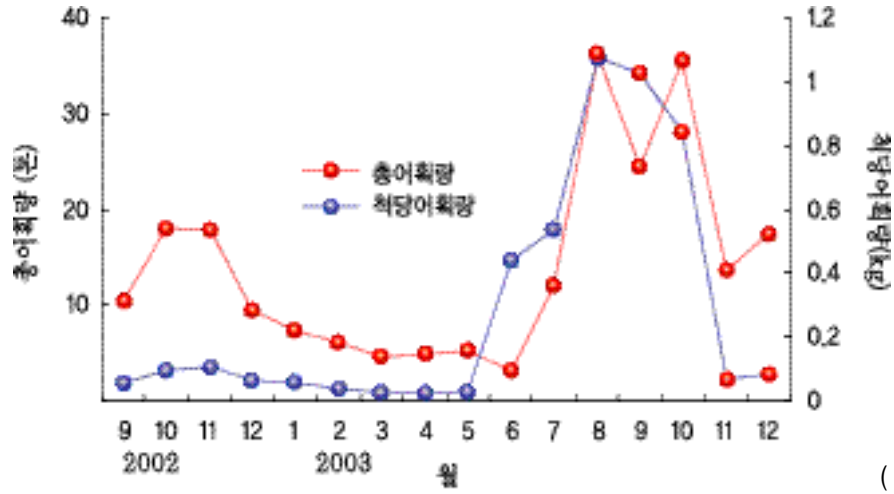
가 , 2002 376 가 , 2000 2,826 1999 가



2-71.

()

가 2003 10 20 가 , 6 가

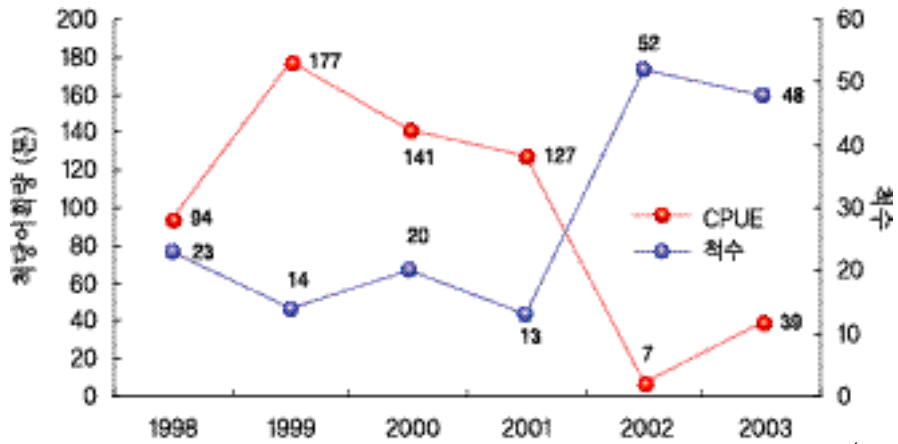


2-72.

(CPUE)

2002

, 2003 8~9 가



2-73.

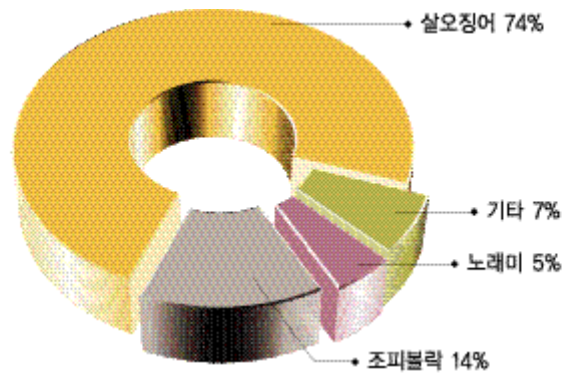
(CPUE)

1999 177 가 , 2002 7

가

2003 48

가 74%, 14%, 5%

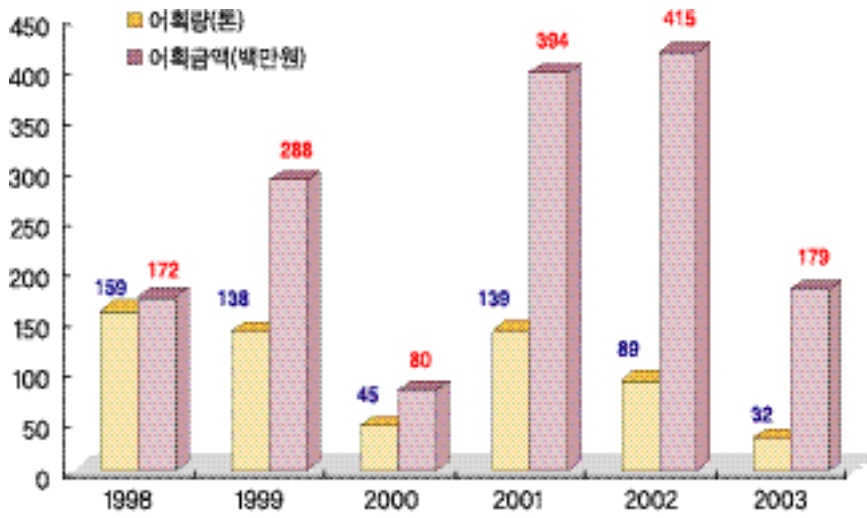


2-7.

(CPUE)

가

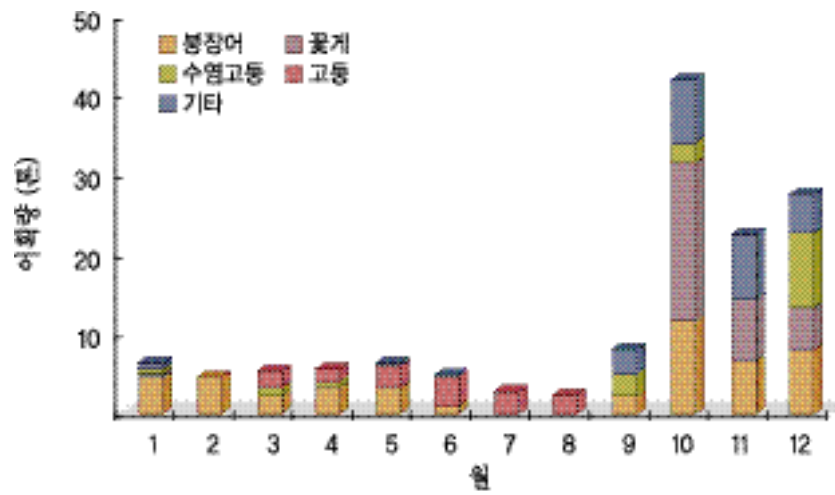
)



2-75.

()

. 1998 159 가
 , 2003 32 가 . 2002 가

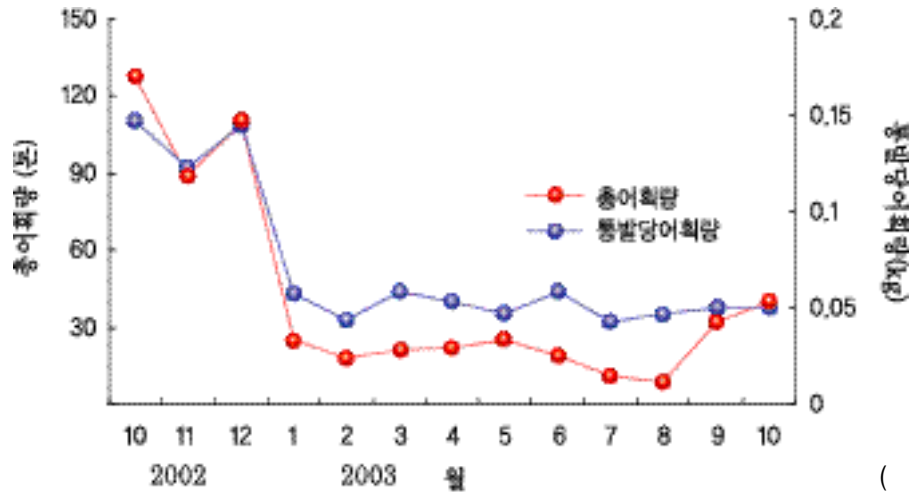


2-76.

()

2003 10 45 가 , 7~8
 가 . 가 .

5



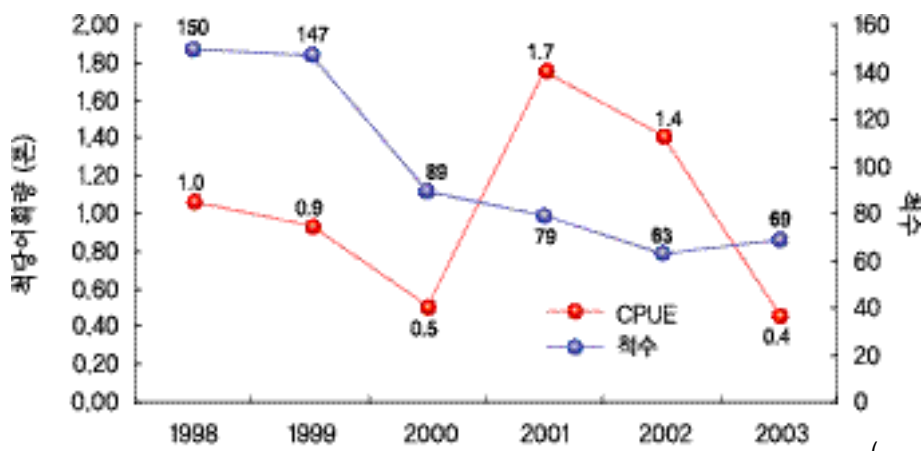
2-77.

(CPUE)

. 2003

2002

, 2002 10 12 가

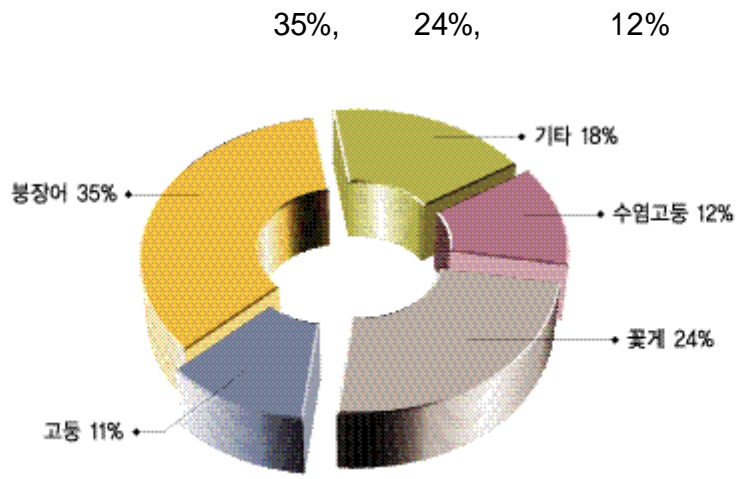


2-78.

(CPUE)

2001 1.8 가 , 2000 2003

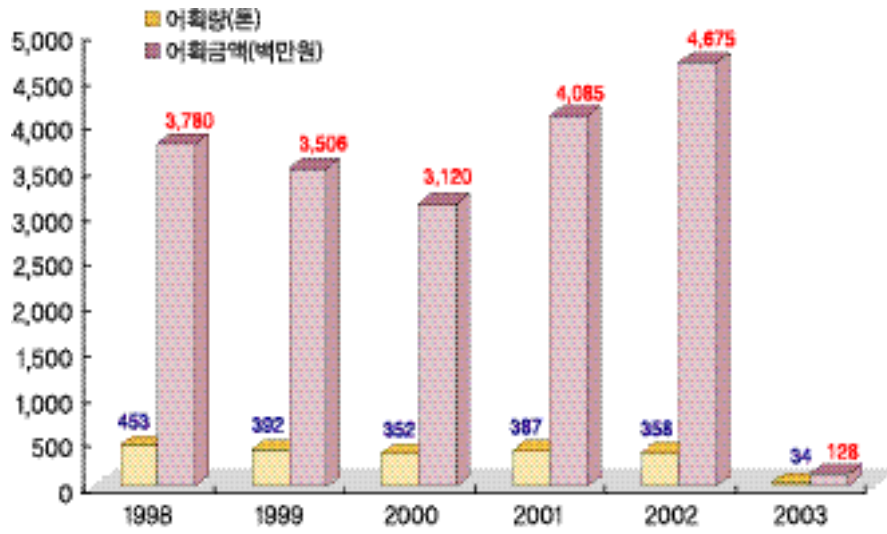
0.5 가



2-79.

(CPUE)

) ()



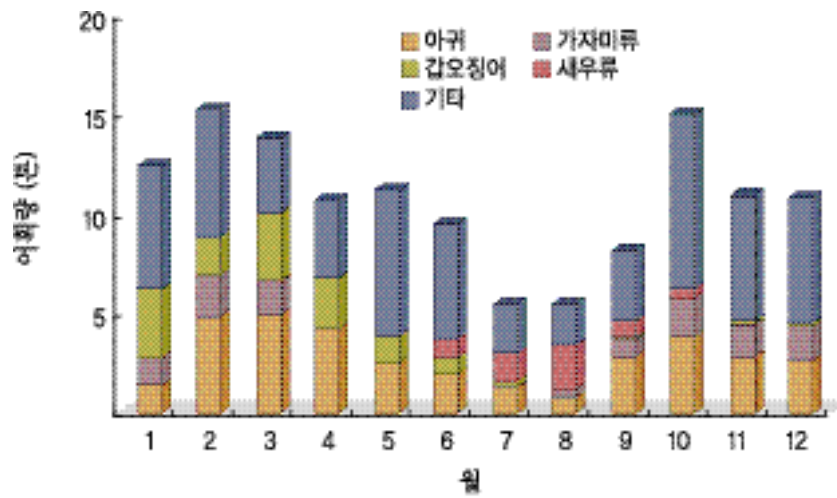
2-80.

()

()

. 1998

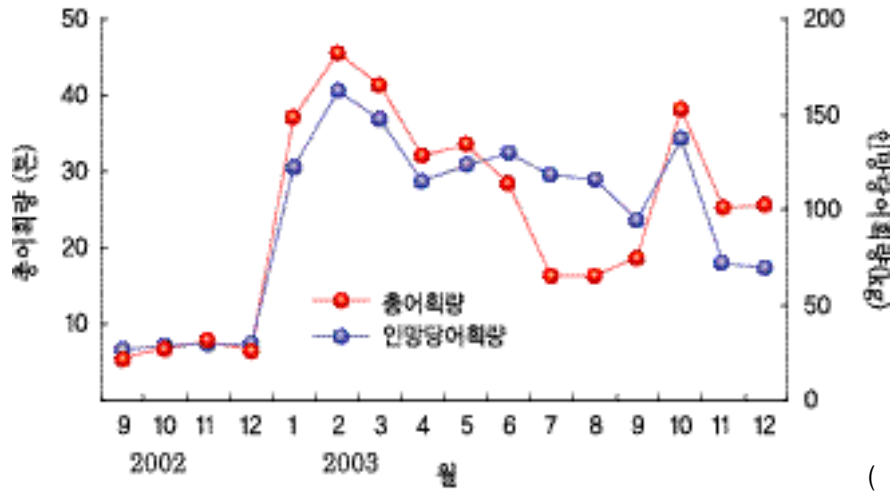
453 가 , 2003 34 가 ,
2002 가 .



2-81.

()

2003 가 10 17 가 , 7~8
가 . 가 .

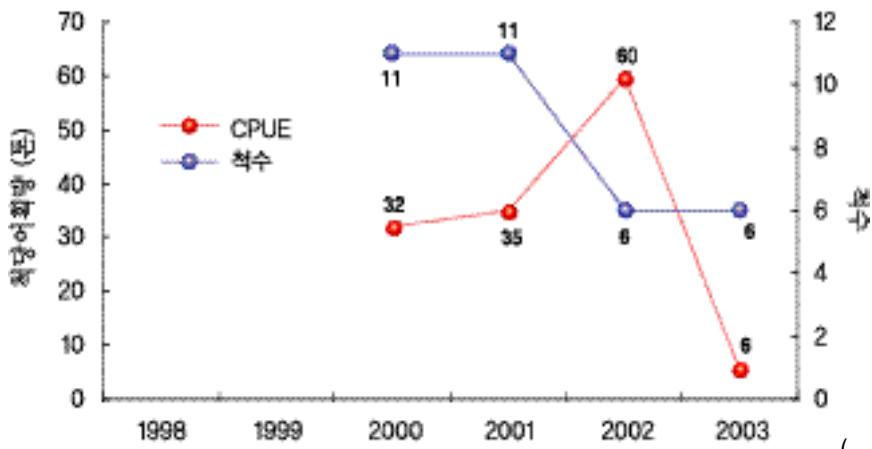


2-82.

() (CPUE)

. 2003 2002

, 2003 2 가

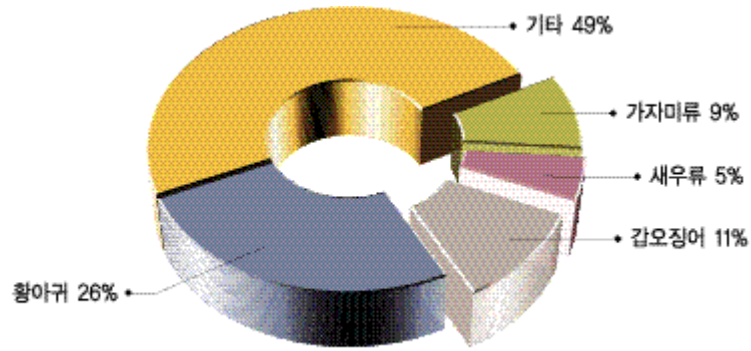


2-83.

() (CPUE)

, 2002 60 가 , 2003
6 가 2003 6 .

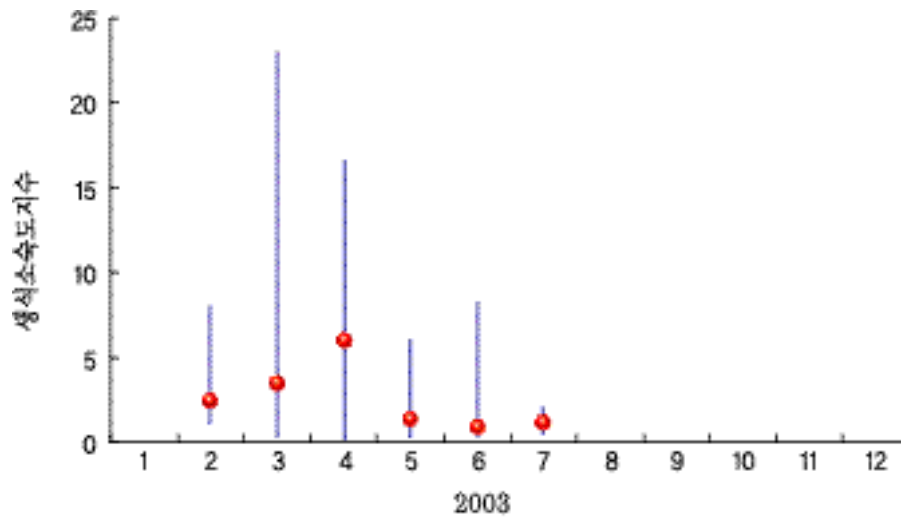
, 26%, 11%, 가 9% .



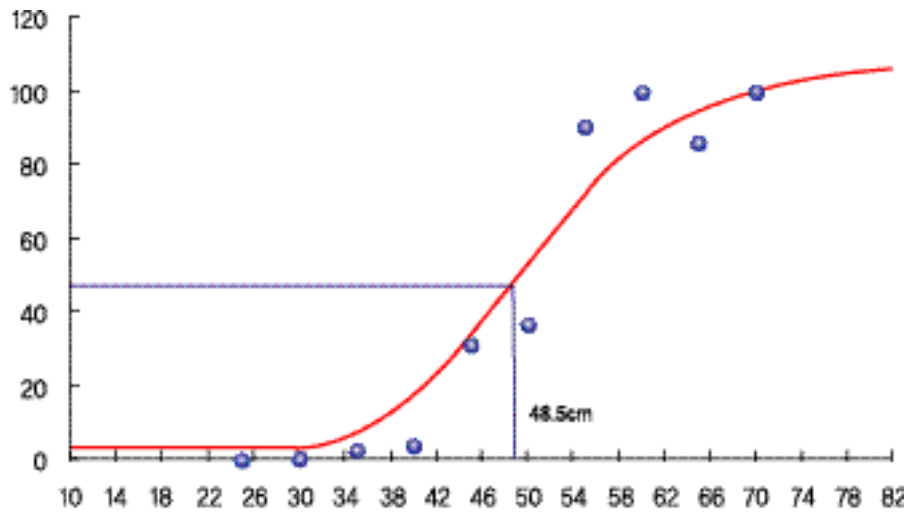
2-84.

() , , 가 .

1~5 , 2~4 , 1,874,560
 , 369,570 , 50% (Total Length) 48.5cm
 , 3.5 .

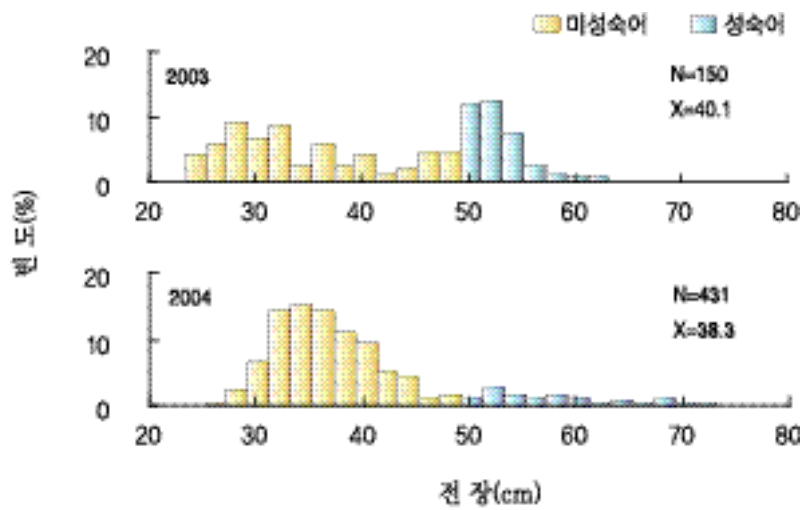


2-85.

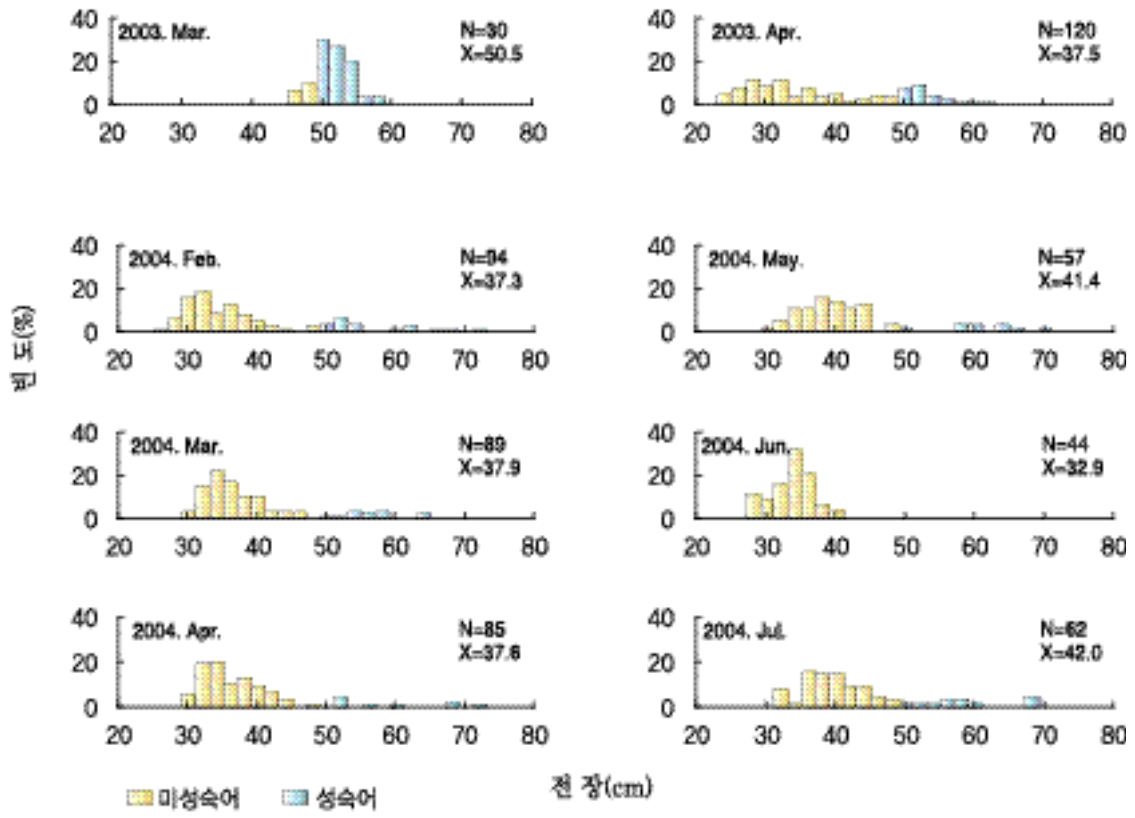


2-86.

2003 () 40.1cm (150) , 2004
 38.3cm (431) . 2003
 (48.5cm) 63.2% , 2004 73.3% .
 2003 2~7 .



2-87.

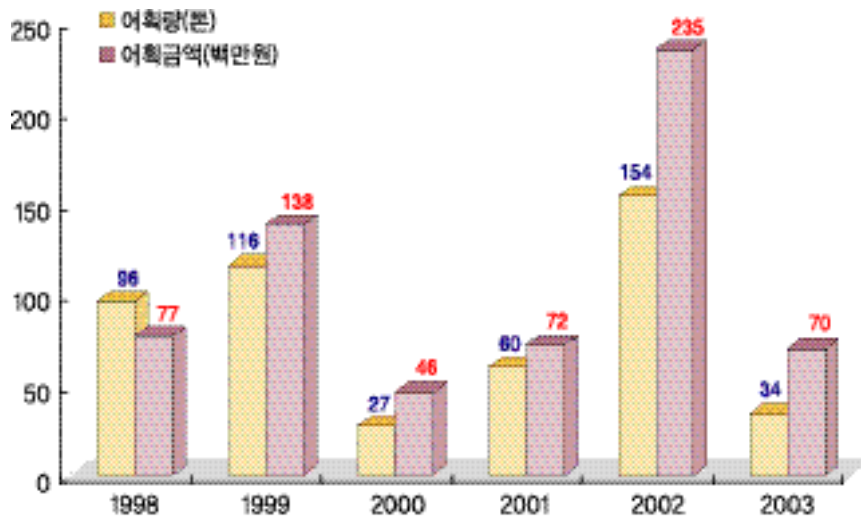


2-88.

()

(CPUE)

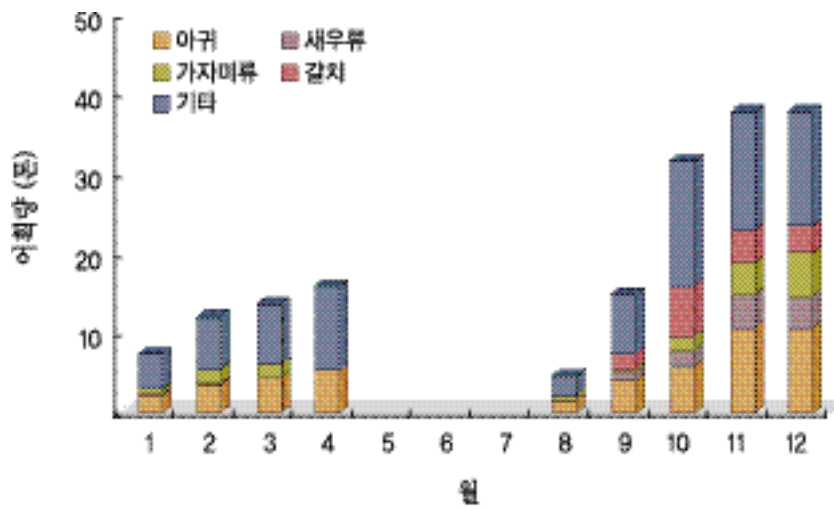
) ()



2-89.

()

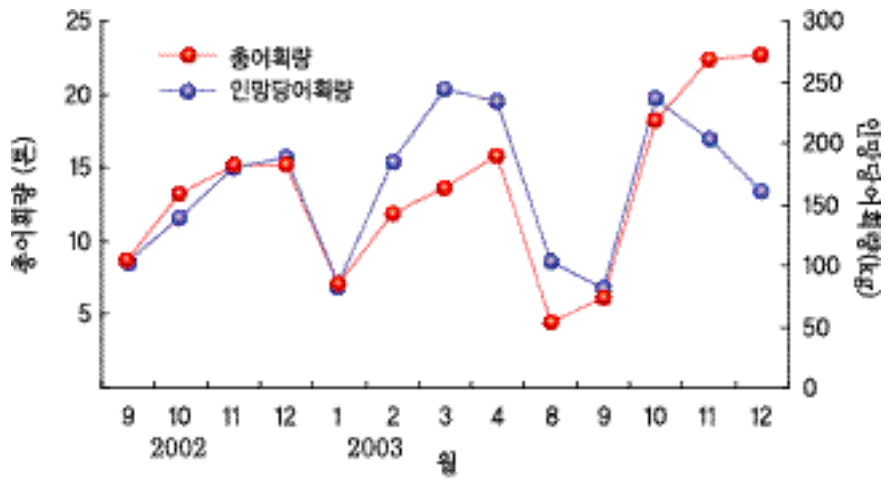
() . 2002
 154 가 , 2000 27 가 ,
 2002 가 .



2-90.

()

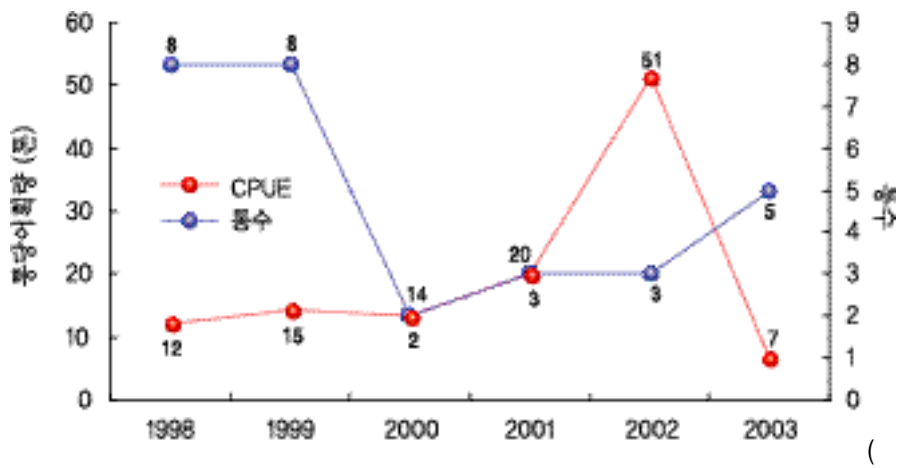
2003 11~12 45 가 , 8
 가 , 5~7 가



2-91.

() (CPUE)

. 2003 2002
, 2003 3 가 .

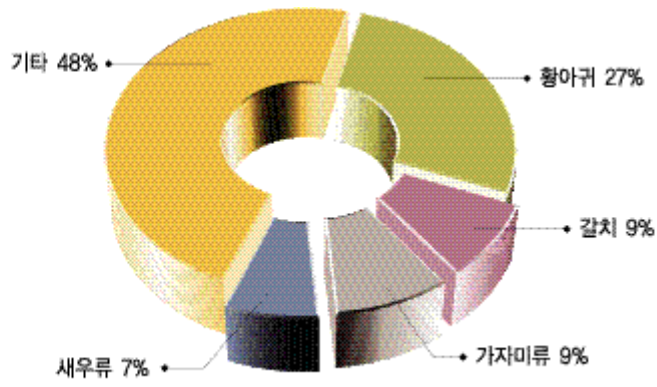


2-92.

() (CPUE)

, 2002 51 가 , 2003
7 가 . 2000 가 .

, 27%, 9%, 가 9%, 가7%

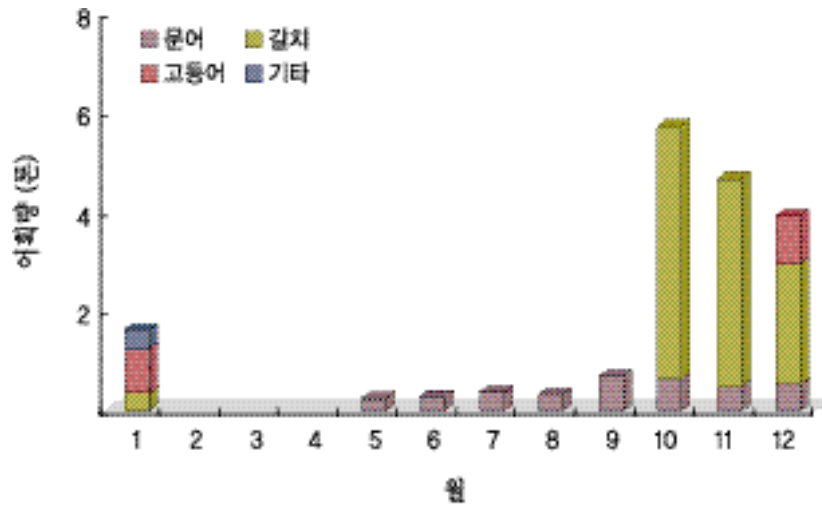


2-93.

()

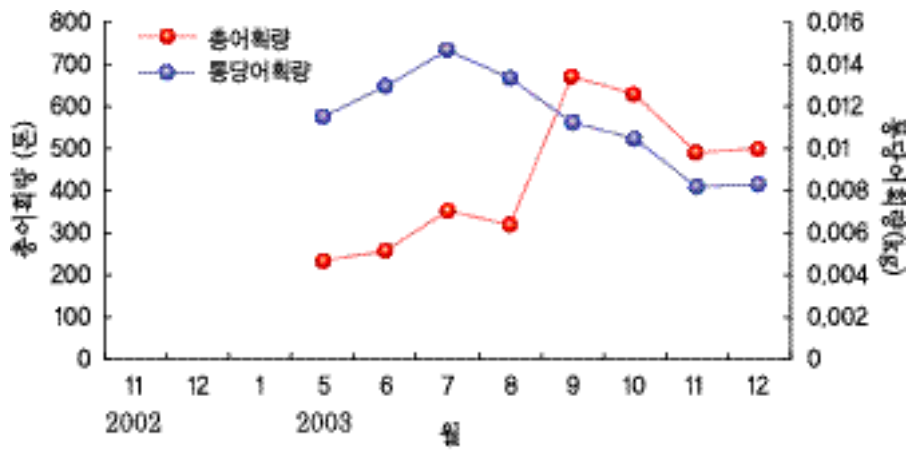
(CPUE)

)



2-94.

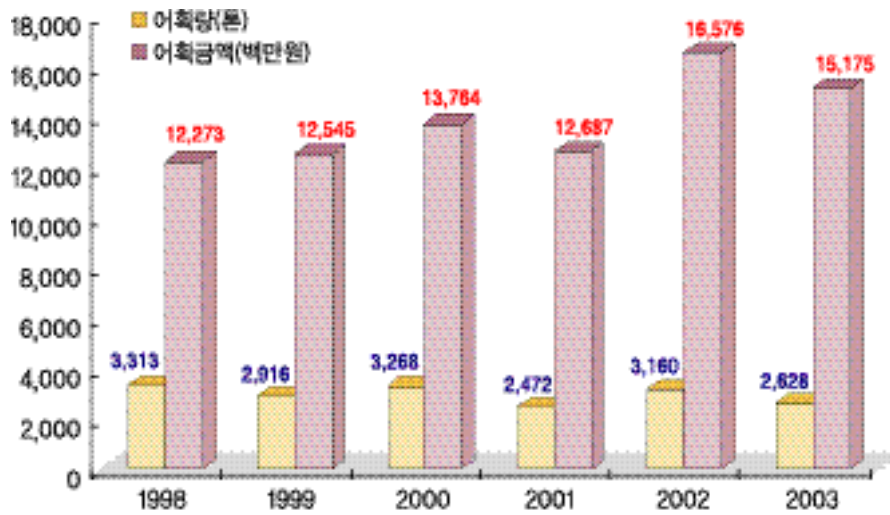
2003 , 10 가 , 5~9 가



2-95.

(CPUE)
 , 2003 7 가

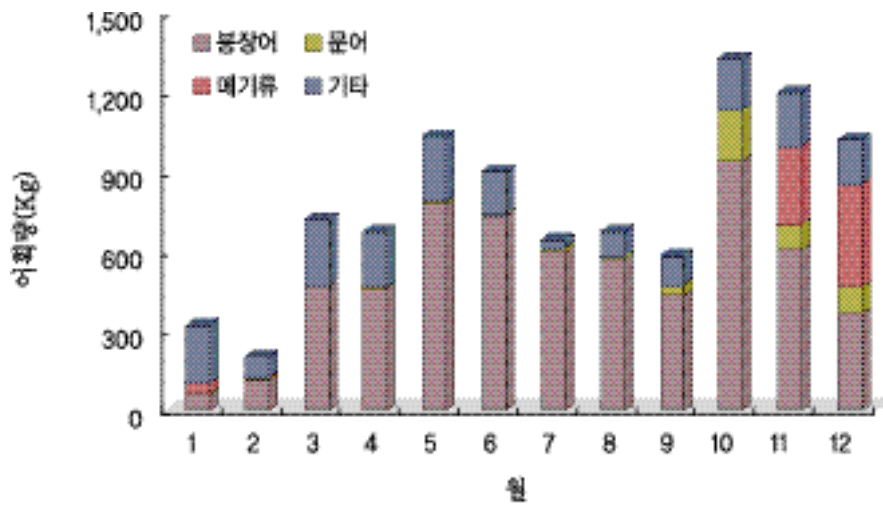
2)
가)



2-96.

()

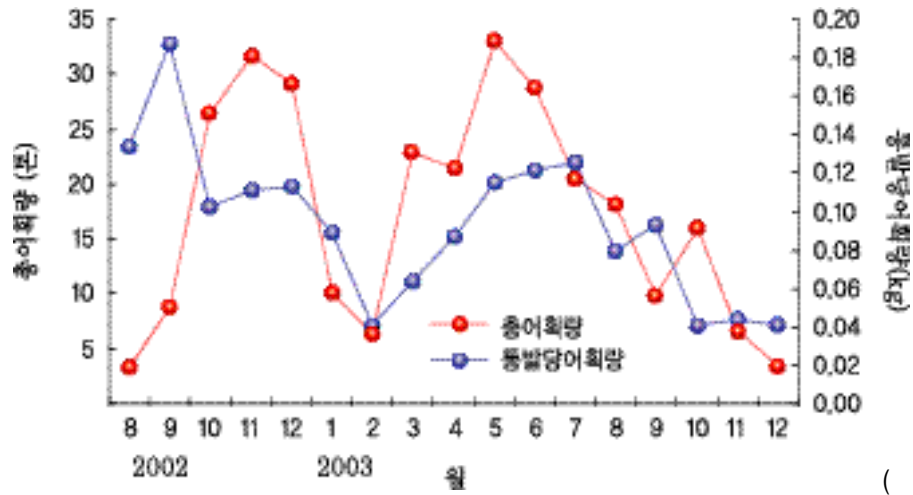
가 , 1998 3,313
 , 2001 2,472 가 , 2002 가



2-97.

()

1.3 가 2 0.2 가 2003 가 10



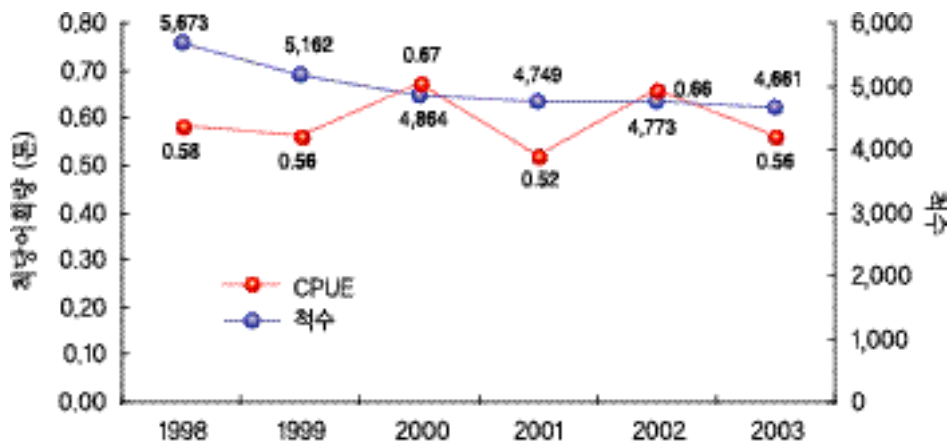
2-98.

(CPUE)

. 2003

2002

2003 9 가



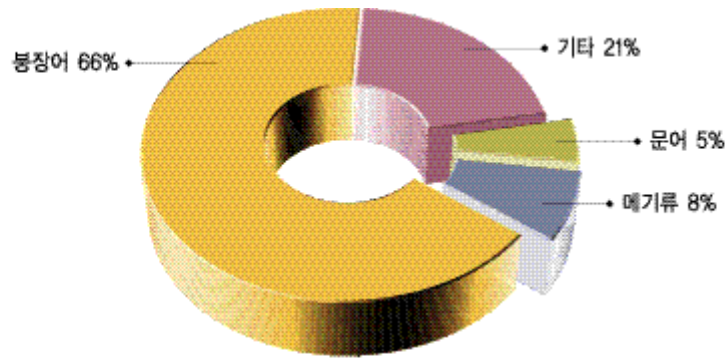
2-99.

(CPUE)

1998 5,673 2003 4,661

1998 0.58 , 1999 0.56 , 2000 0.67 , 2001 2002

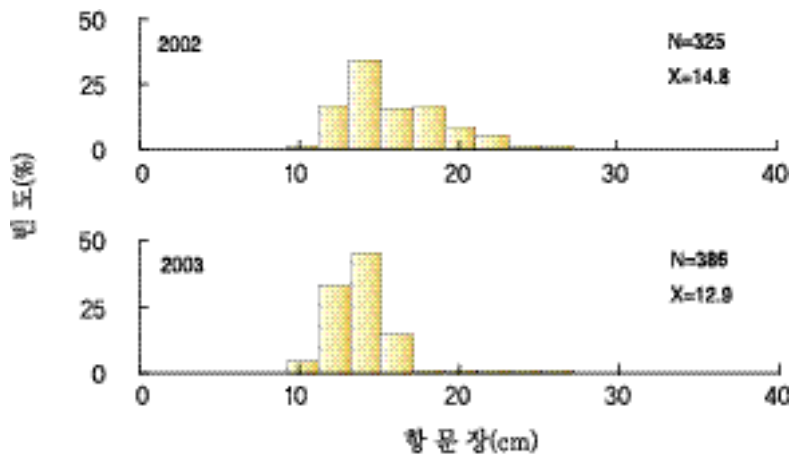
0.52 , 0.66 가 , 2003 0.56



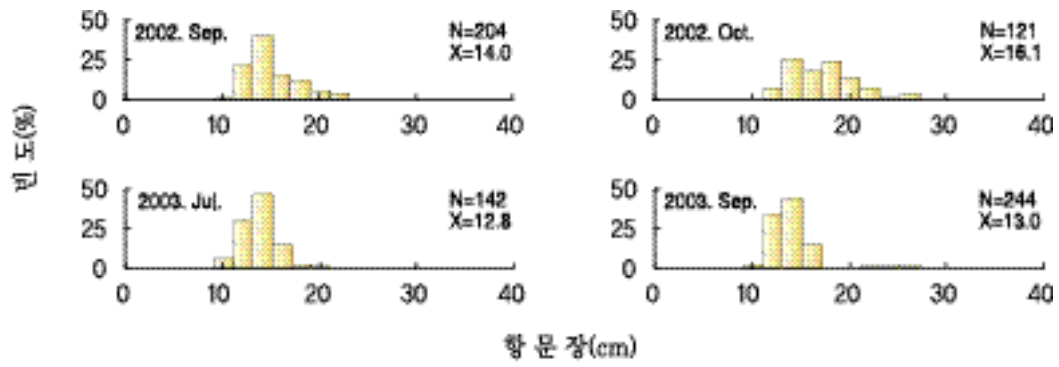
2-100.

가가 66%, 8%, 5%

4~6, 50% (Anal Length)
 50.0cm, 3~4
 2002 () 14.8cm (325)
 2003 12.9cm (386) 2002 2003



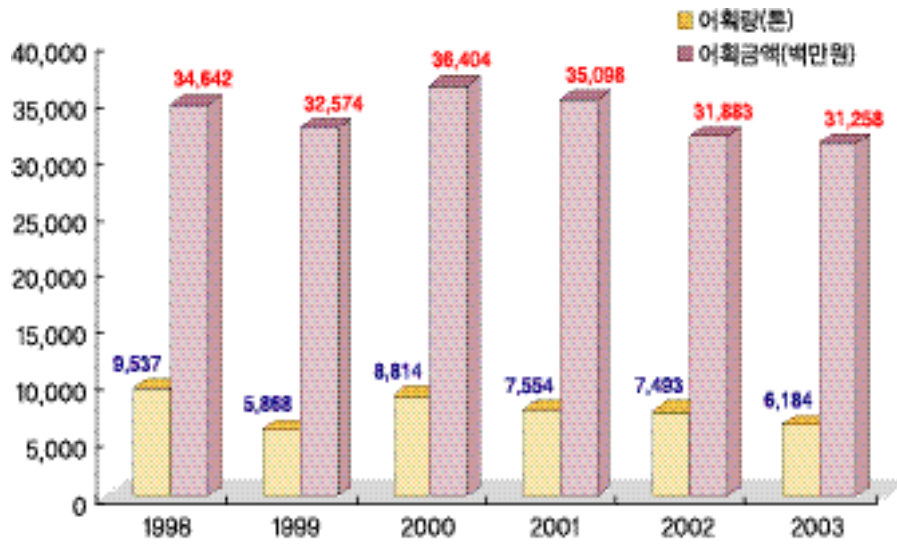
2-101.



2-102.

가 , 가 (CPUE) 가

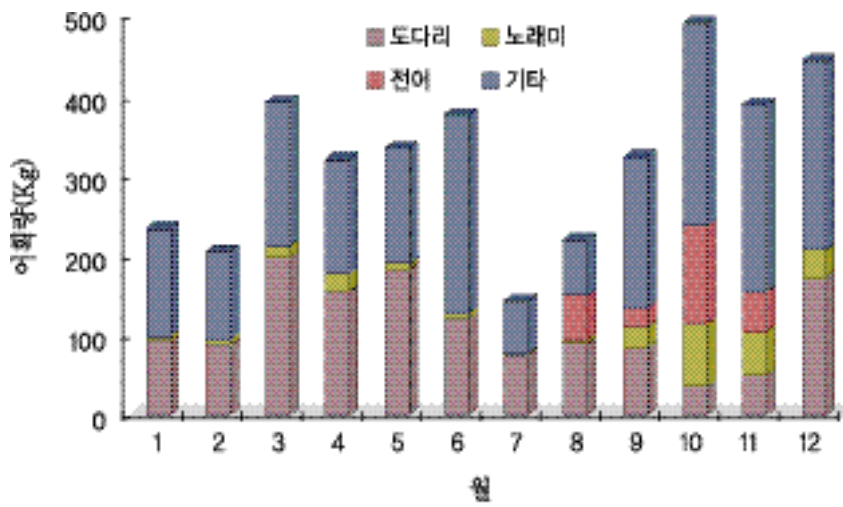
)



2-103.

()

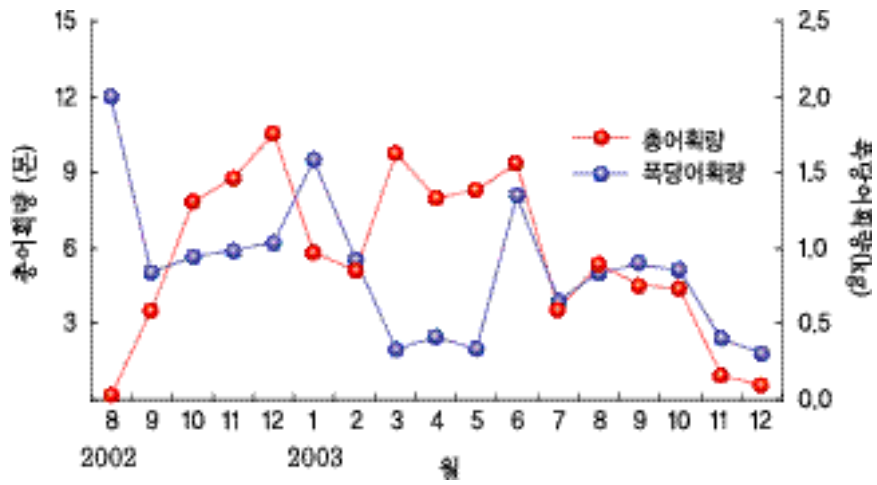
가 , 1998 9,537
 , 1999 5,868 가 , 2000 가



2-104.

()

0.5 가 7 0.15 가 2003 10 가

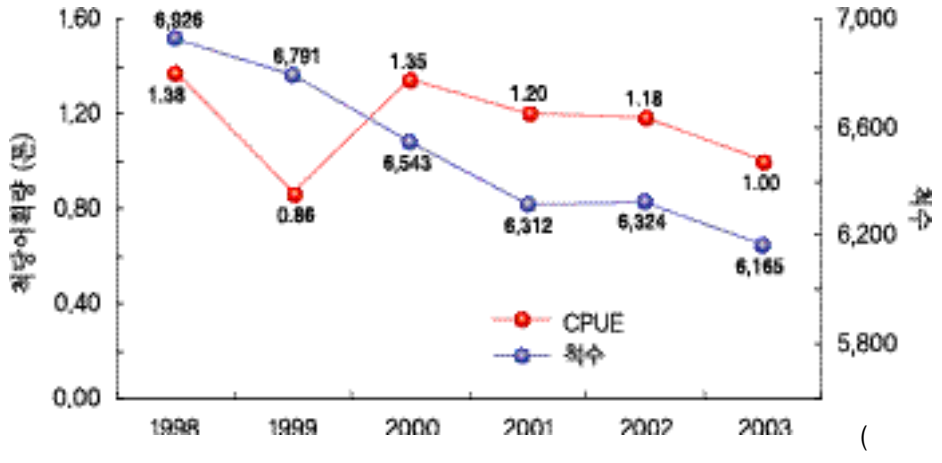


2-105.

(CPUE)

. 2003 2002
, 2002 8

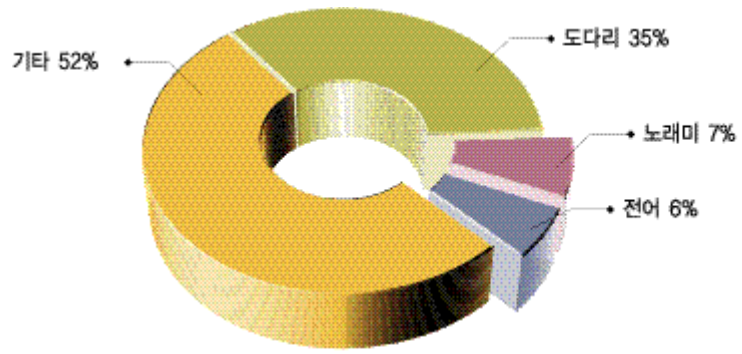
가



2-106.

(CPUE)

1998 1.38 , 1999 0.86 , 2000 1.35 , 2001 2002
1.20 , 1.18



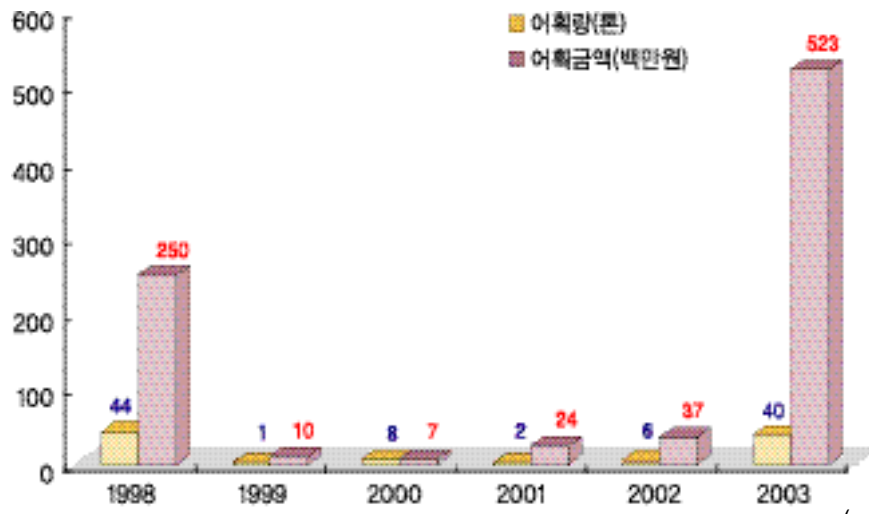
2-107.

, 가 가 35% ,

, , .

(CPUE)

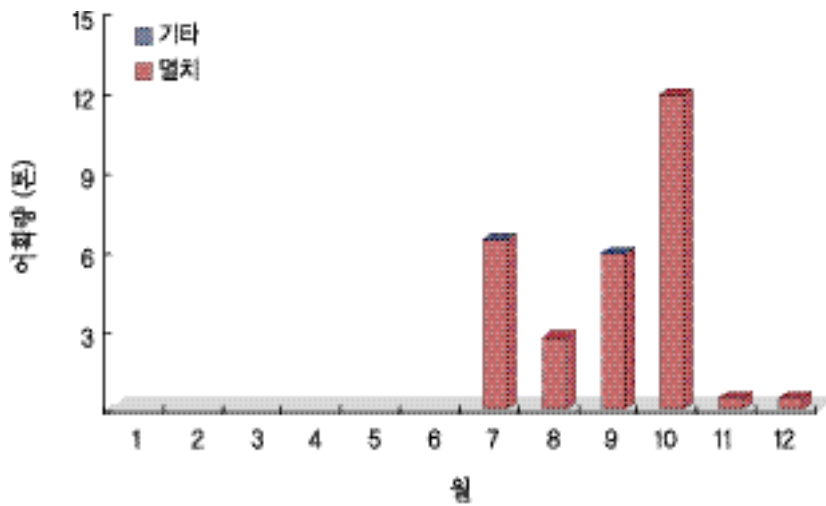
)



2-108.

()

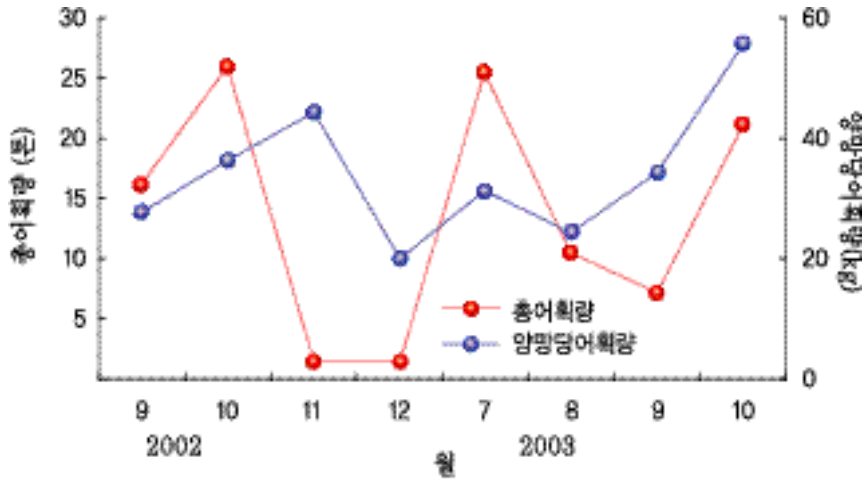
1998 44 가
 , 1999~2002
 , 2003 40 가
 2003 가 .



2-109.

()

2003 10
 12 가 , 11~12 . 1~6 .



2-110.

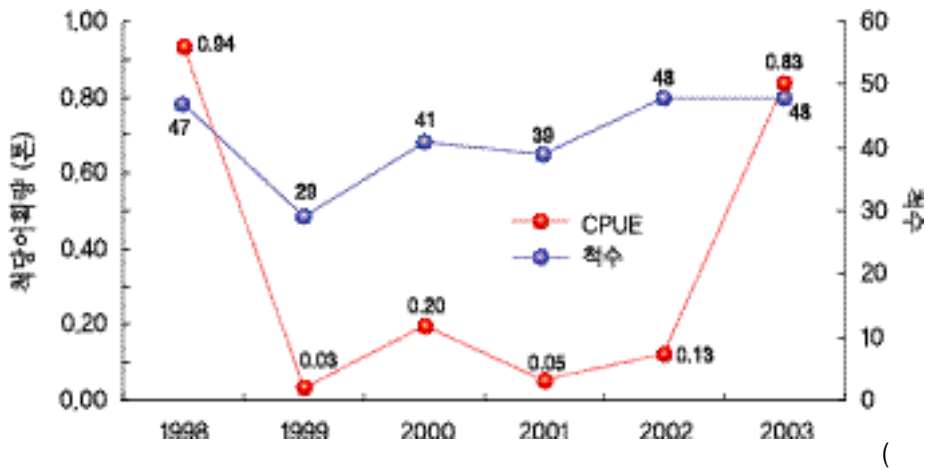
(CPUE)

2002
10 가

가

()

2003
, 2003



2-111.

(CPUE)

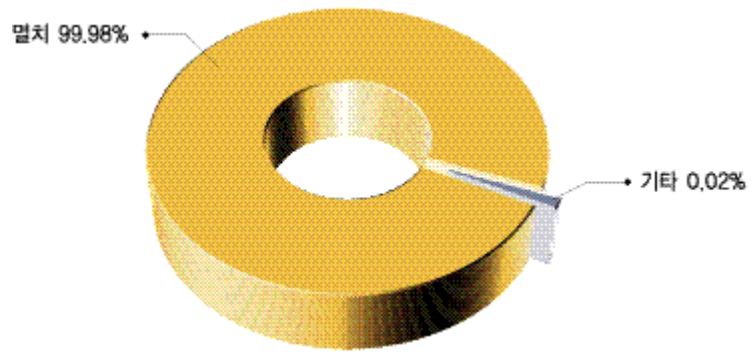
가 . CPUE
2003 0.83 가

1998 47

1999 29

1998 0.94 , 1999 0.03 , 2002 0.13 ,

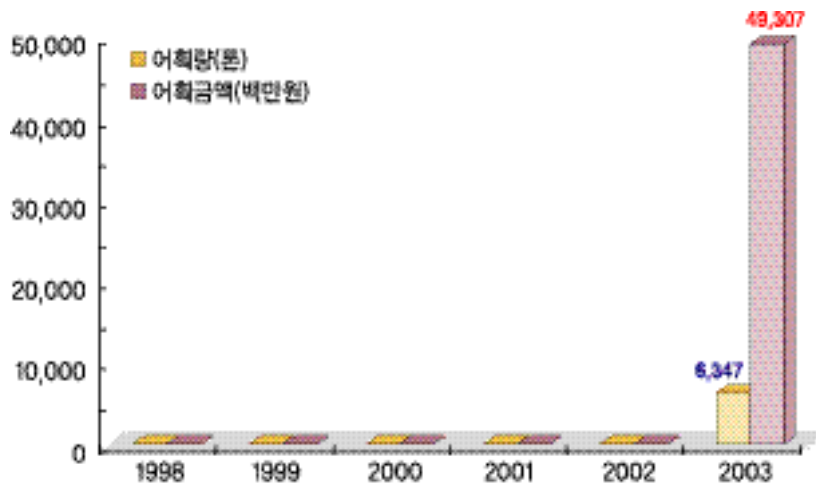
()



2-112.

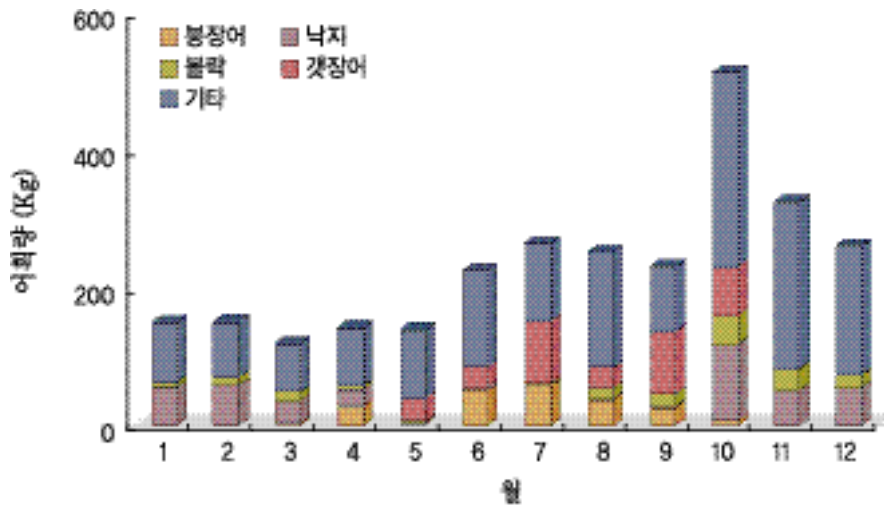
(CPUE) 가

)



2-113.

. 2003 6,347 .

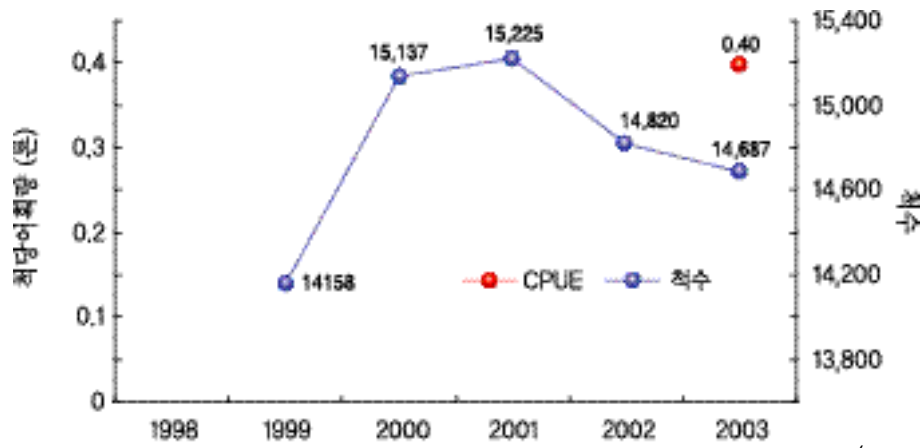


2-114.

2003

10

0.5 가 , 1~5 .

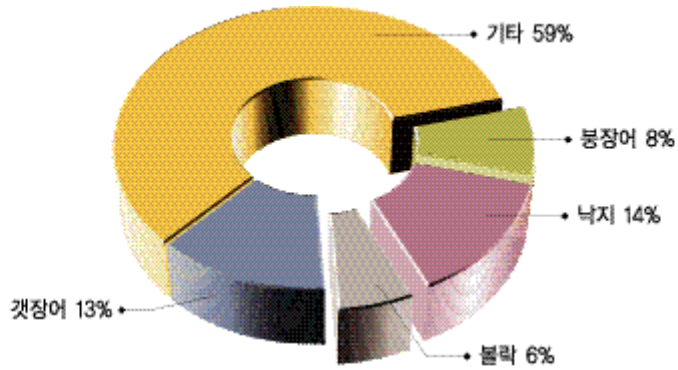


2-115.

(CPUE)

1999 14,158 가 2001 15,225

CPUE 2003 0.40

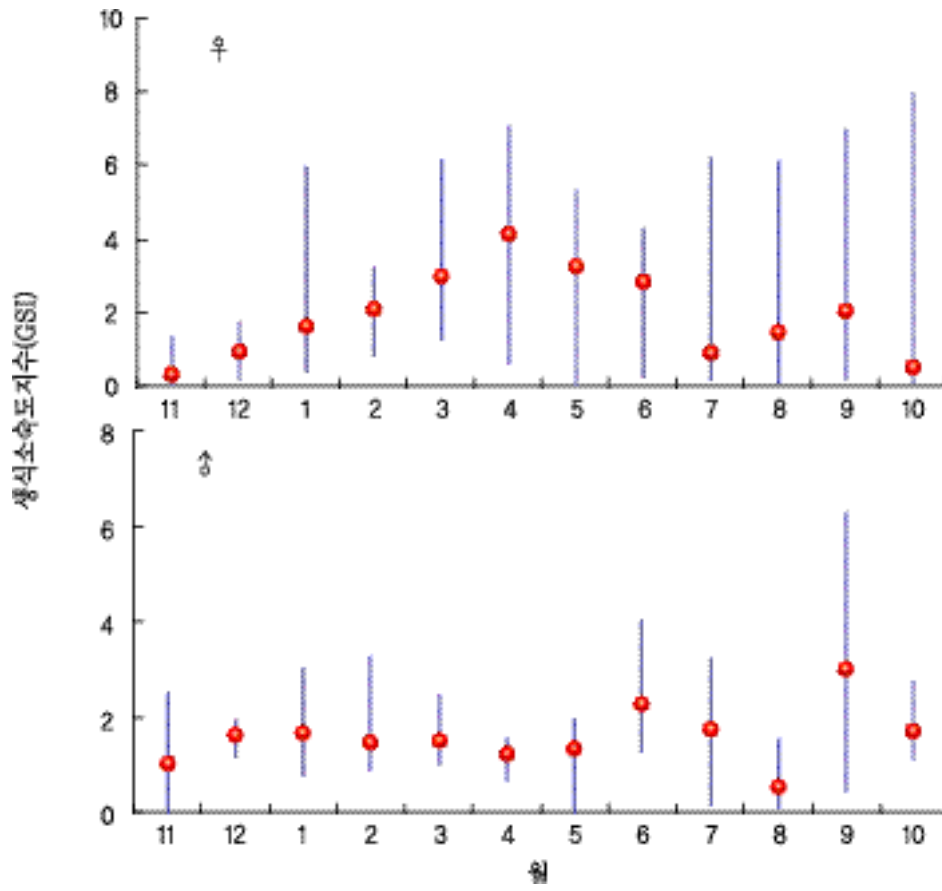


2-116.

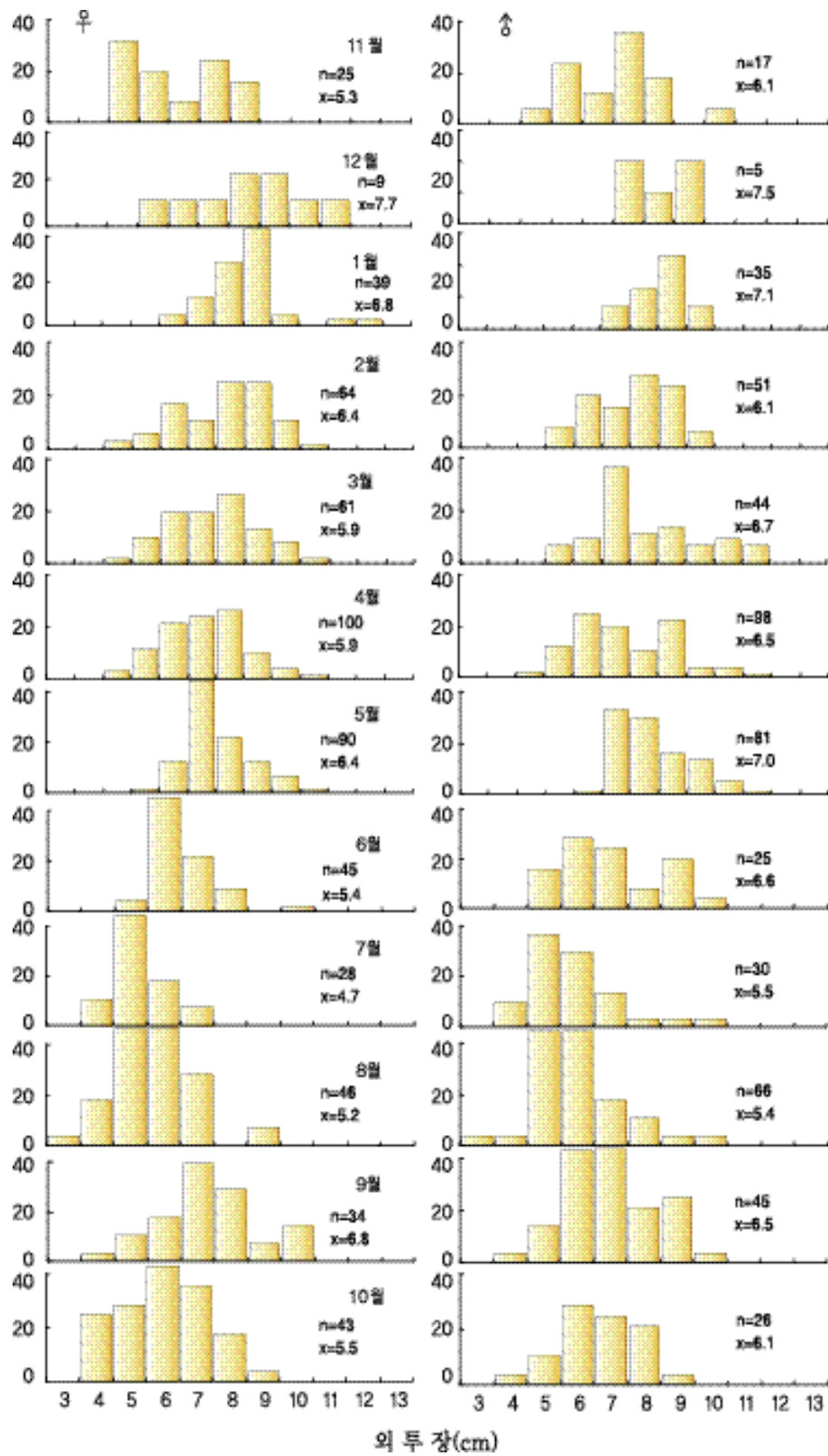
가 14%, 13%, 8%

4~7

() 7.0 cm (4,444)

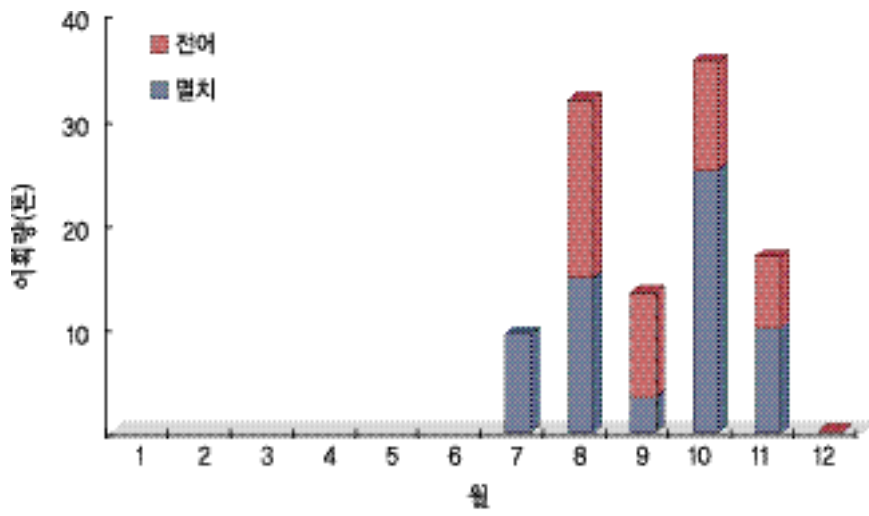


2-117.



2-118.

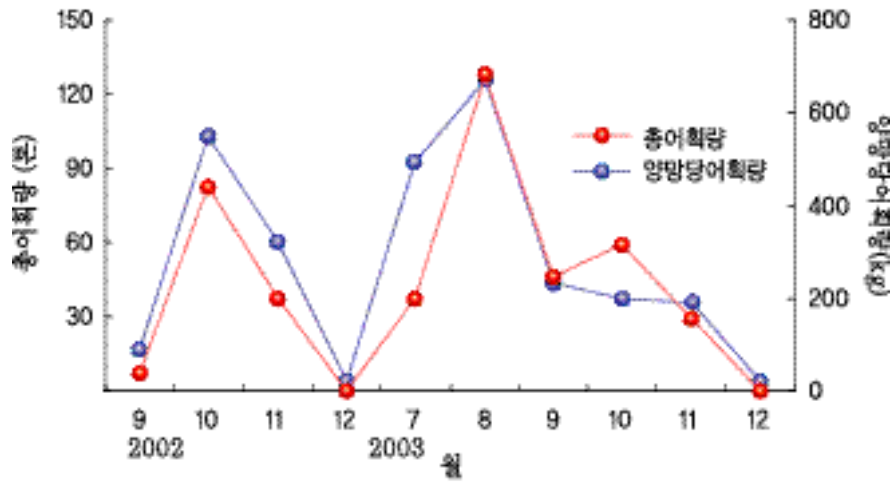
) ()



2-119.

() 2003

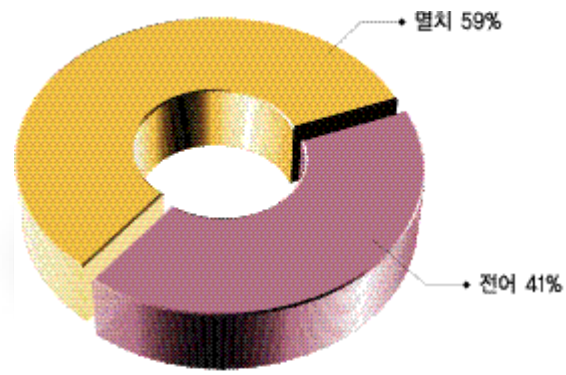
10 35 가 , 7 가 . 1~6



2-120.

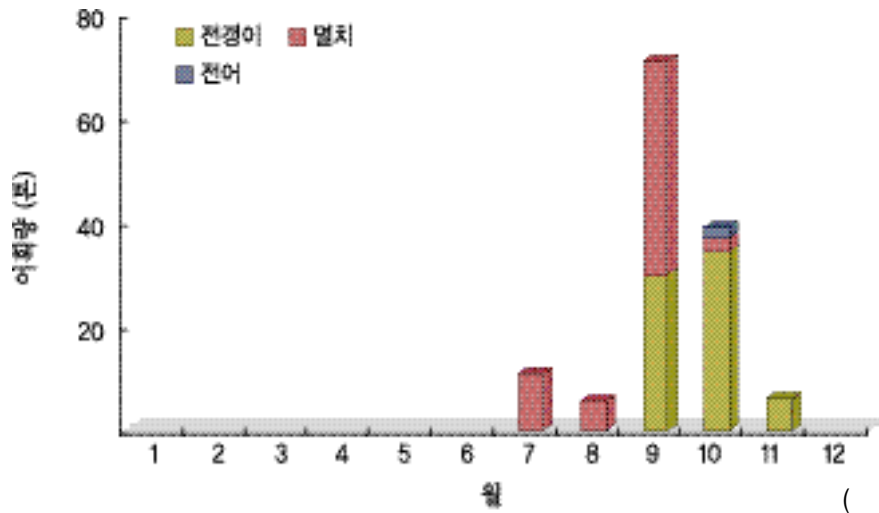
() (CFUE)

. 2003 8 가 ,



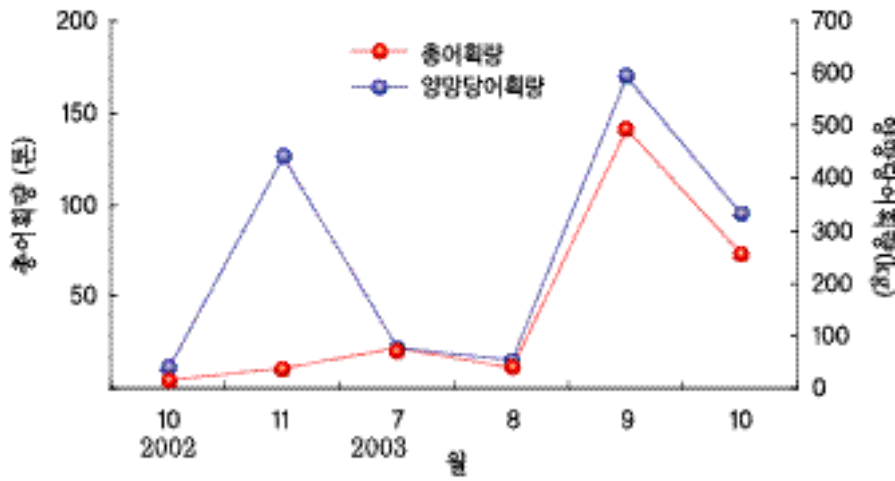
2-121.

) ()



2-122.

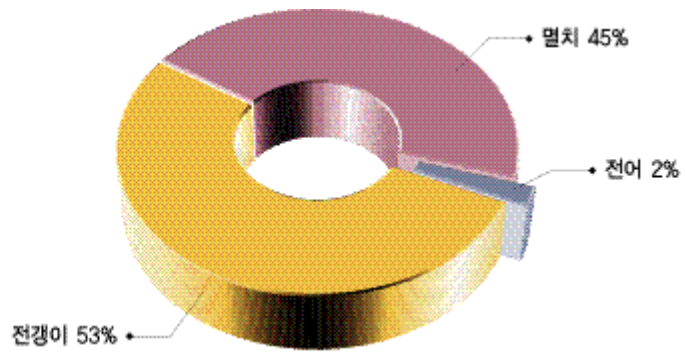
70 가 , 8 11 . 1~6 , 12



2-123.

(CPUE)

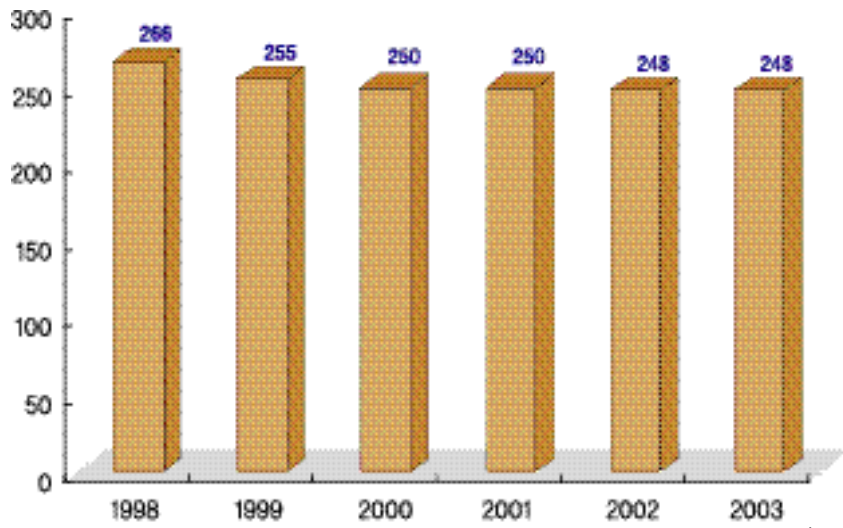
2003 9 가 , 2002 10 가



2-124.

3) (,)
가)

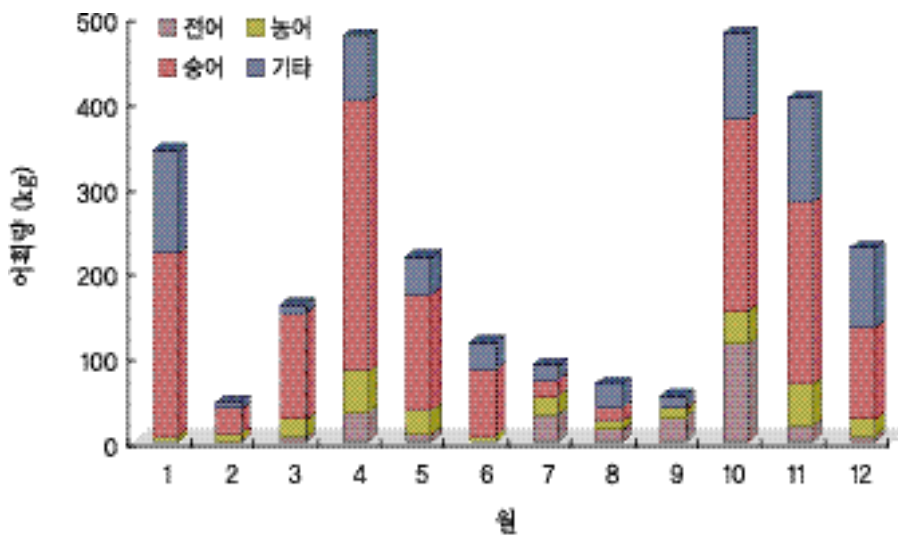
1998 266 , 1999 255 , 2000 250 , 2001 250 ,
2002 248 , 2003 248 .



2-125.

가

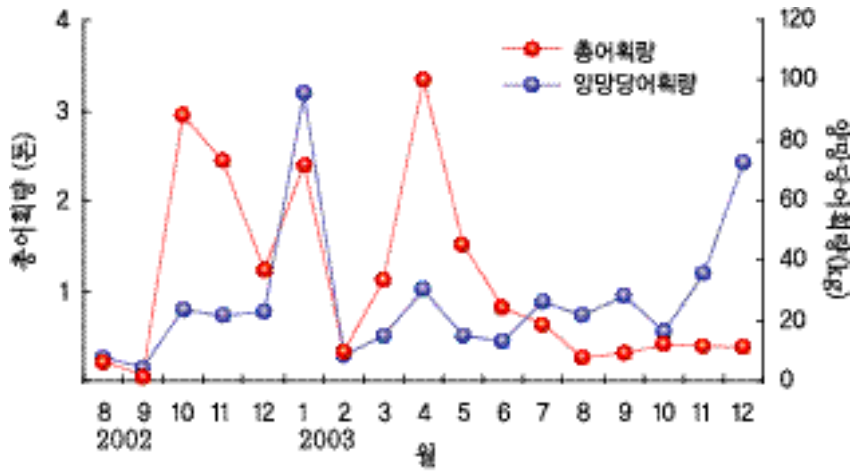
()



2-126.

()

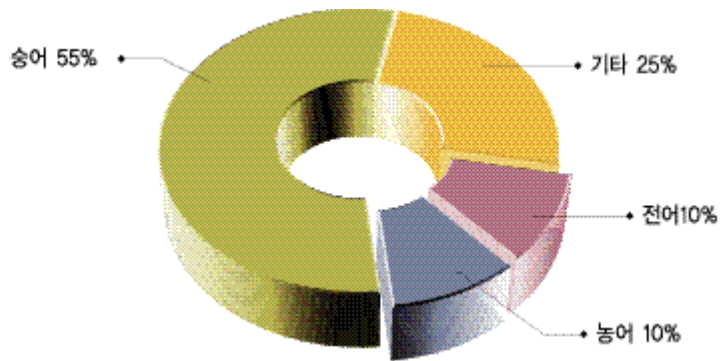
2003 4 10
0.5 가 , 2 0.07 가 .



2-127.

(CPUE)

2003 1 가 , 2002 9 가

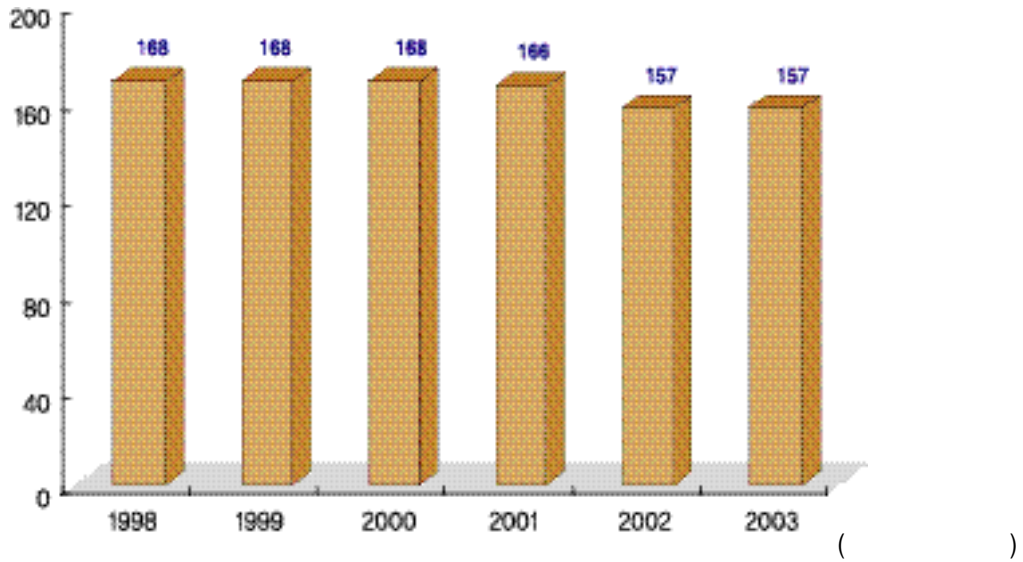


2-128.

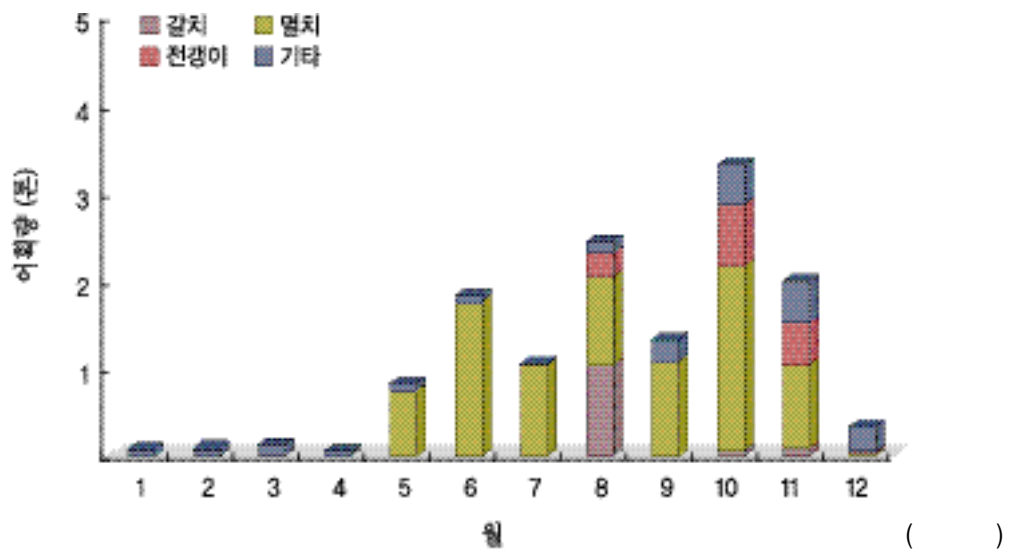
10%, 10% , 가 가 55% ,

)

1998 168 , 2001 166 , 2002 2003 157



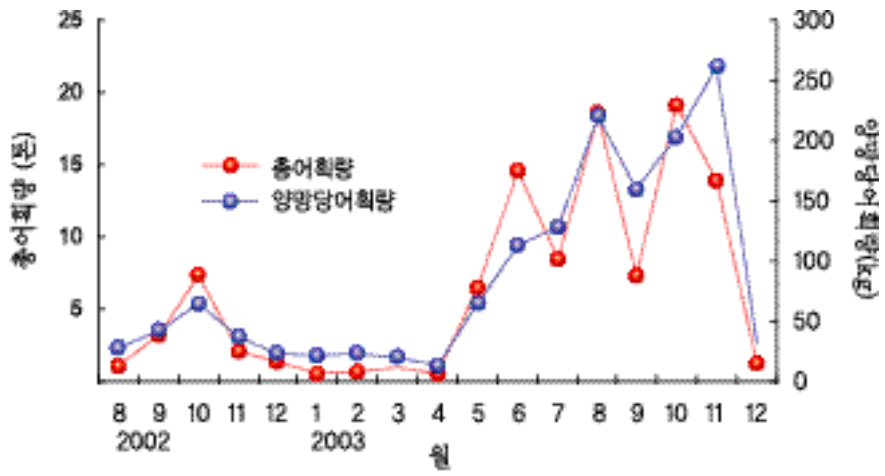
2-129 가



2-130.

10 3.6

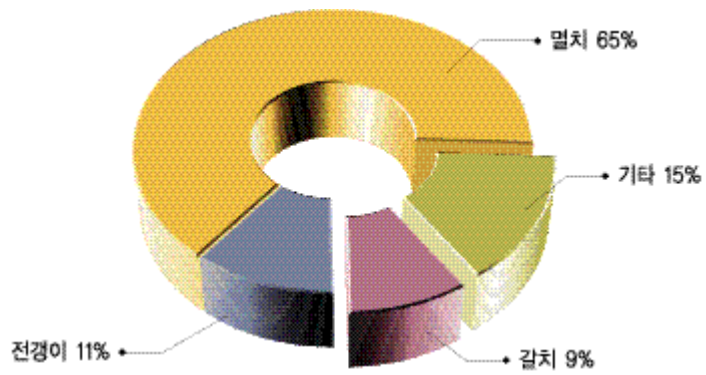
가 , 1~4



2-131.

(CPUE)

2003 11 가 , 2002



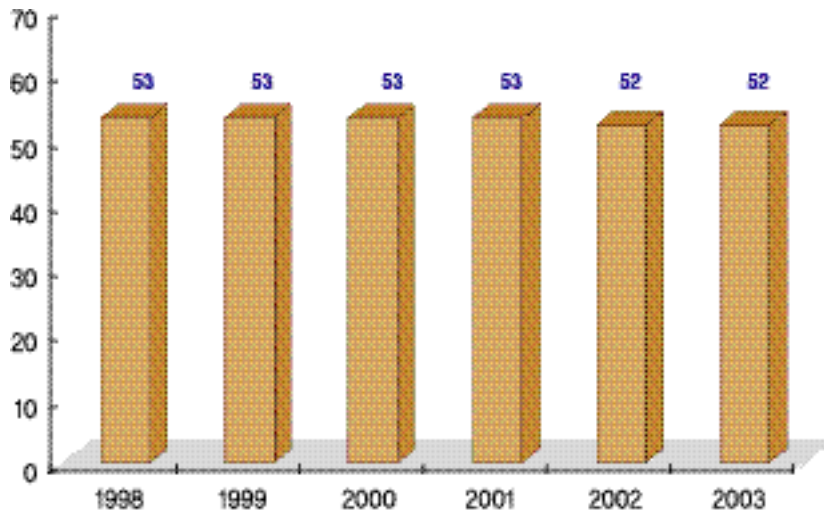
2-132.

, 가가 65%

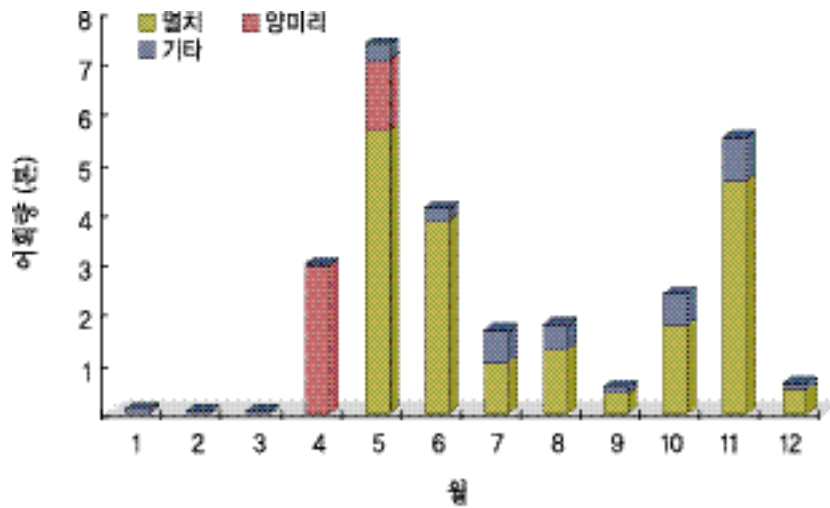
11%, 9%

)

1998 53 2002 2003 52



2-133. 가 ()

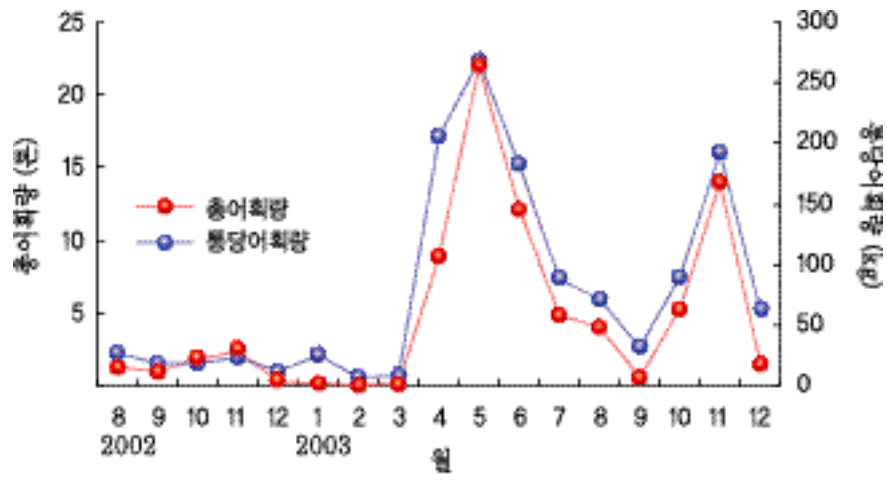


2-134. 월 ()

2003

5 7.5

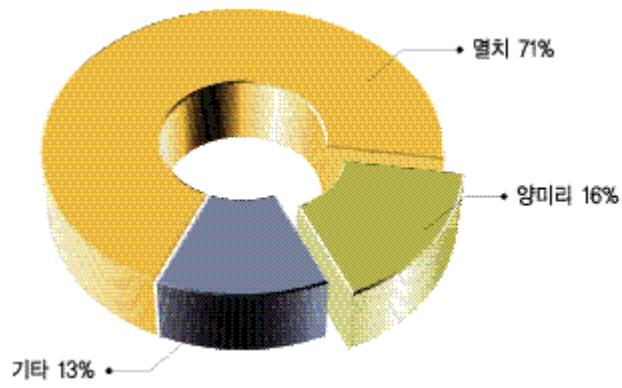
가 , 9 가 . 1~3



2-135.

(CPUE)

2003 5 가 , 2002



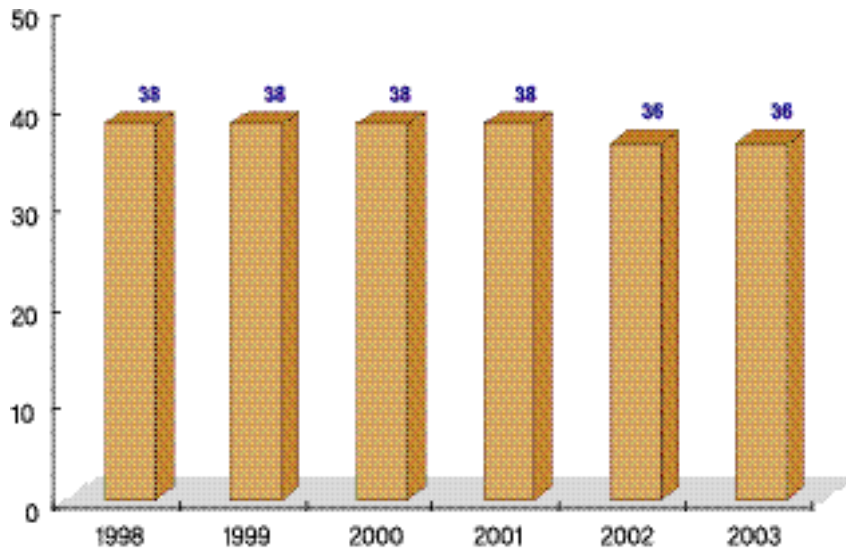
2-136.

, 가가 71% ,

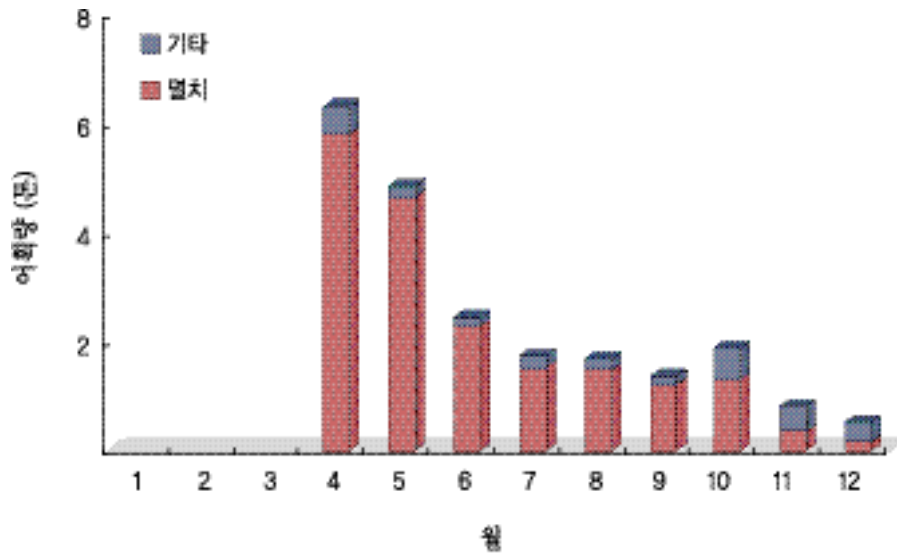
16%

)

1998 38 , 2002 2003 36

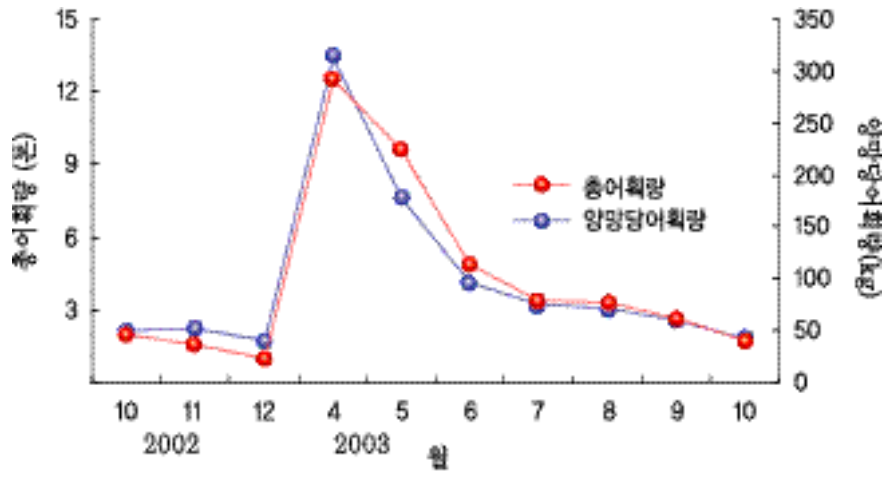


2-137. 가 ()



2-138. 월 ()

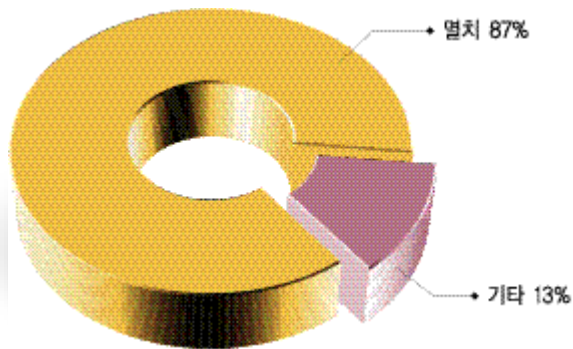
가 , 12 가 1 , 1~3 4 6.3



2-139.

(CPUE)

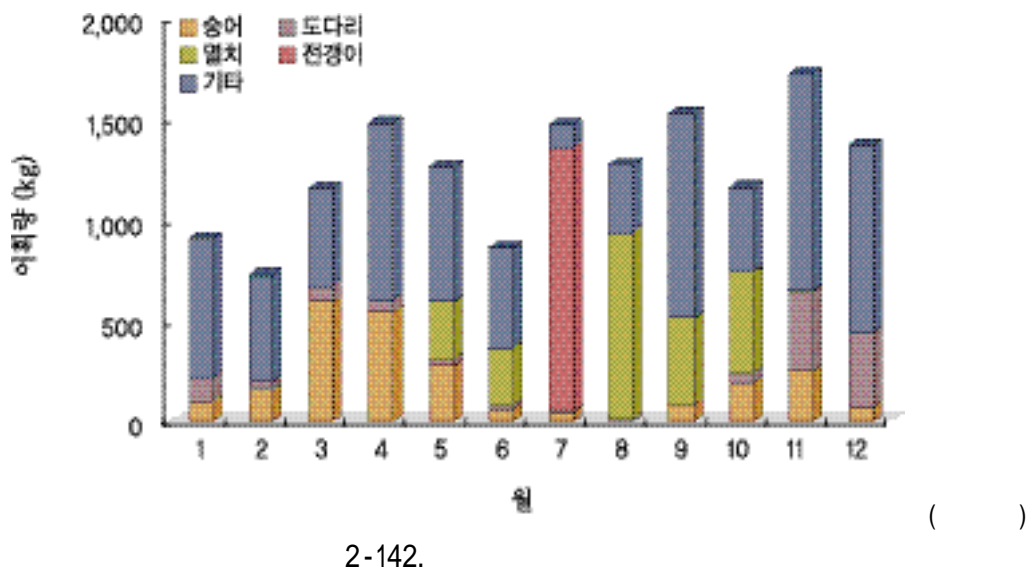
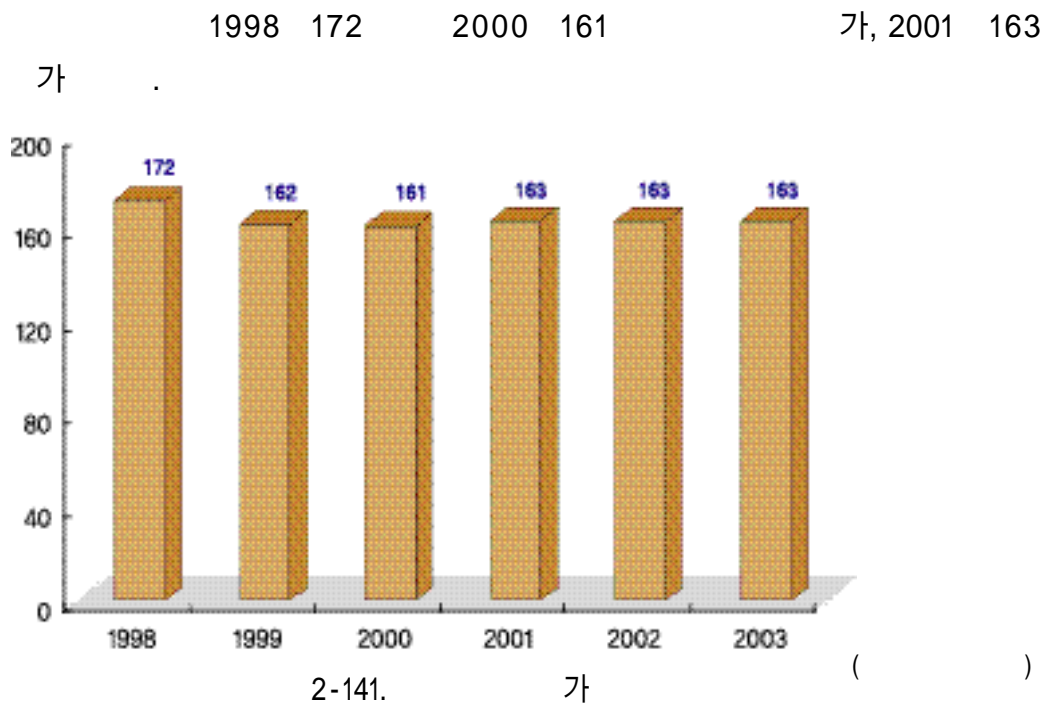
2003 4 가 , 2002



2-140.

, 가가 87%

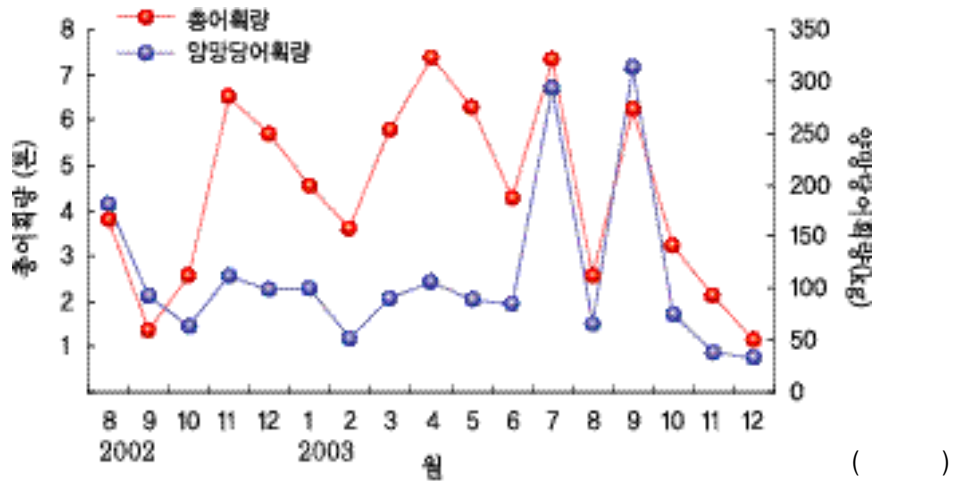
)



2003

11

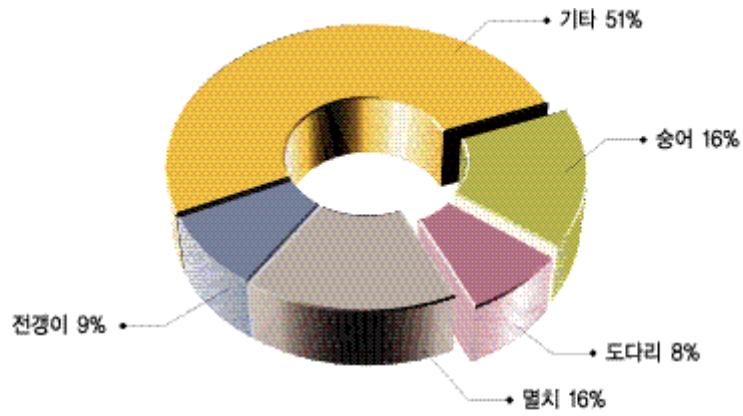
1.7 가 , 2 6 .



2-143.

(CPUE)

2003 7 9 가 , 2003 12 가



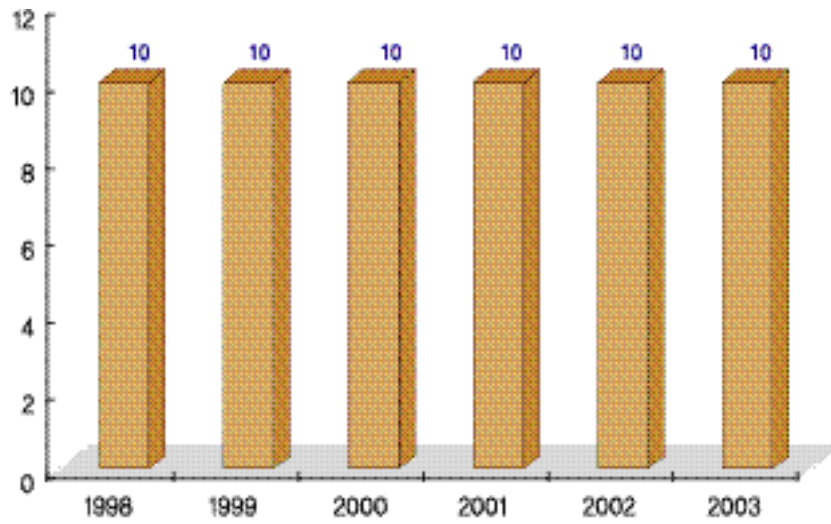
2-144.

가가 16%

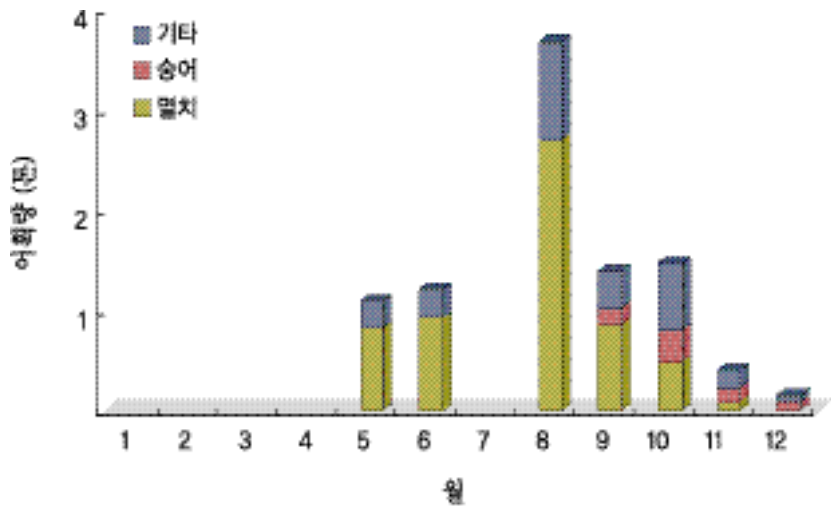
9%, 8%

)

1998 10 , 2003 10 가 .

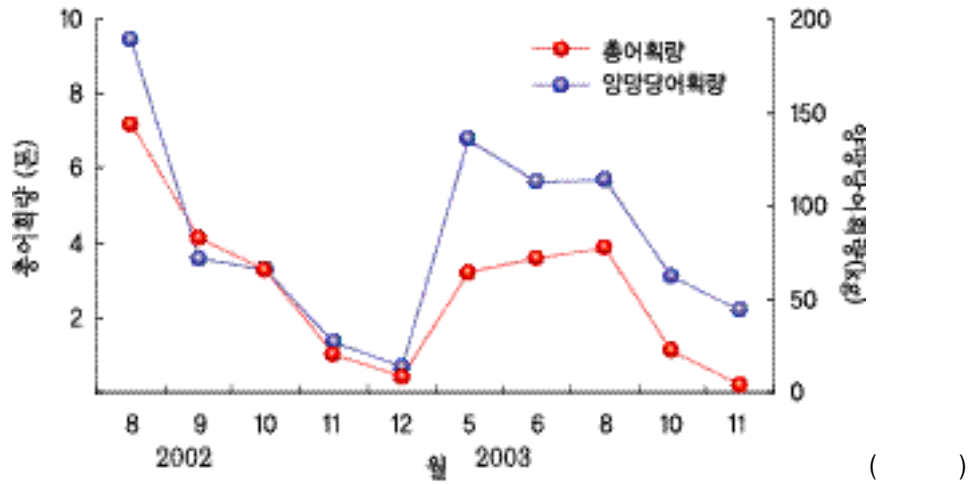


2-145. 가 ()



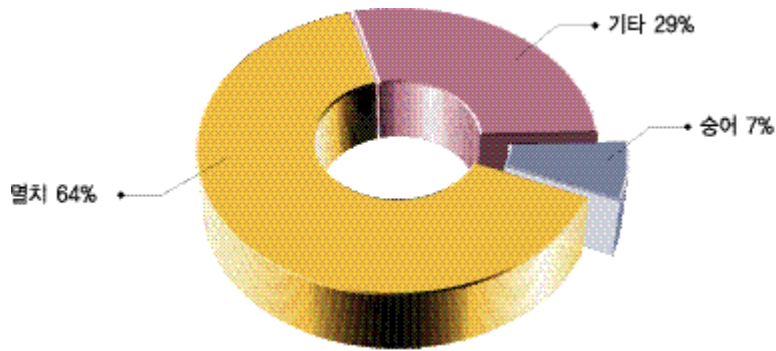
2-146. 월 ()

가 , 12 가 . 1~4 7 8 4



2-147.

(CPUE)
2002 8 가 , 2002 12



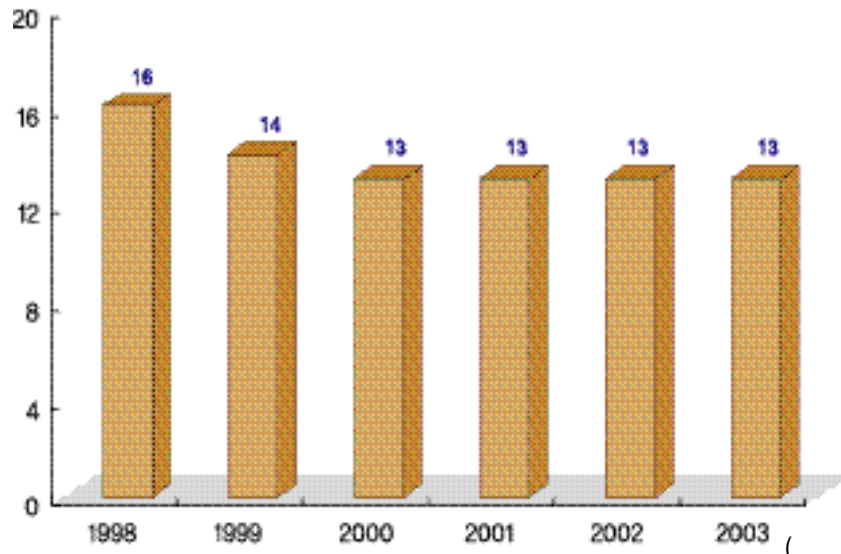
2-148.

, 가가 64% , 7%

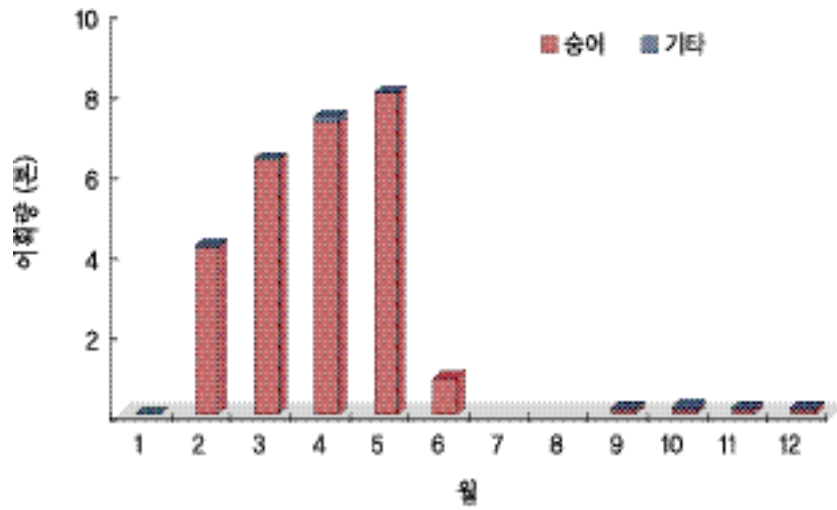
)

1998 16

2003 13



2-149. 가



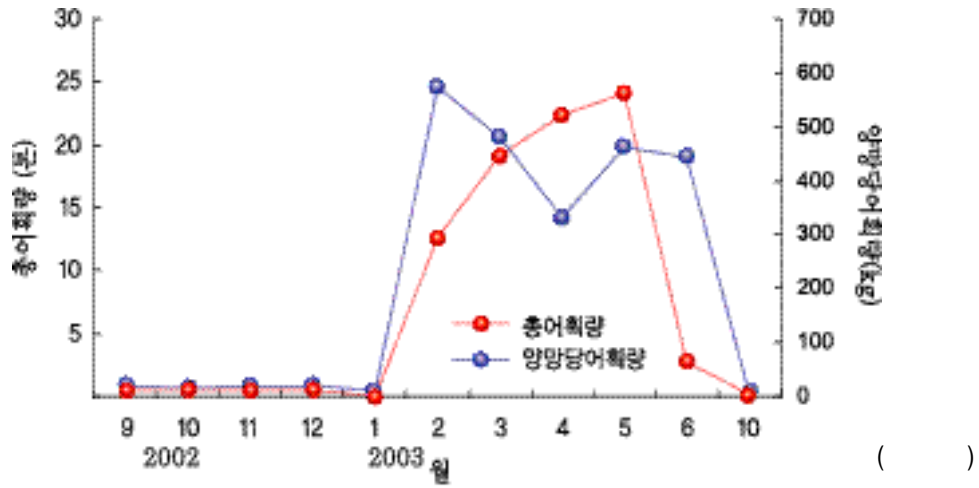
2-150.

2003

5

8.5

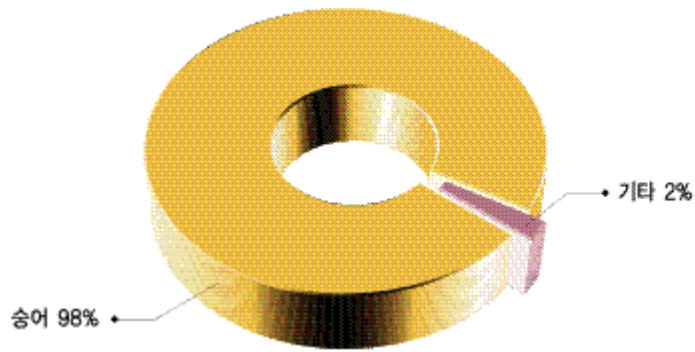
가 , 6 가 . 7~8



2-151.

(CPUE)

2003 2~6 , 2002

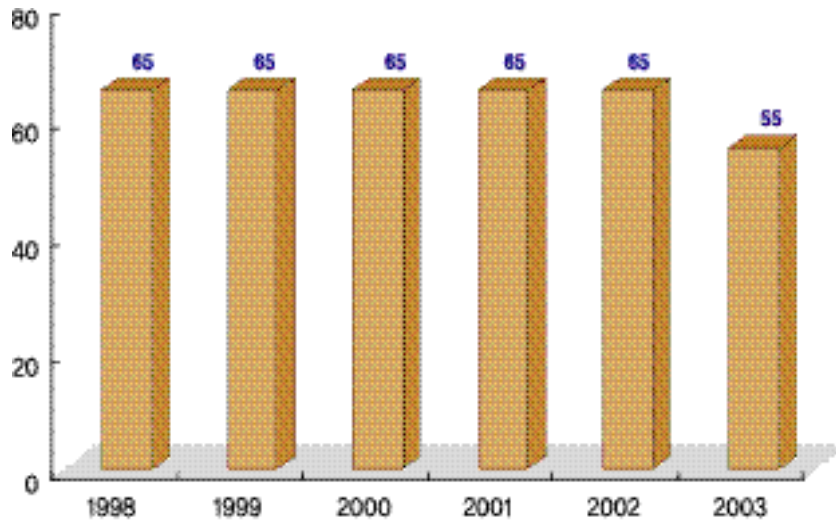


2-152.

가 98%

)

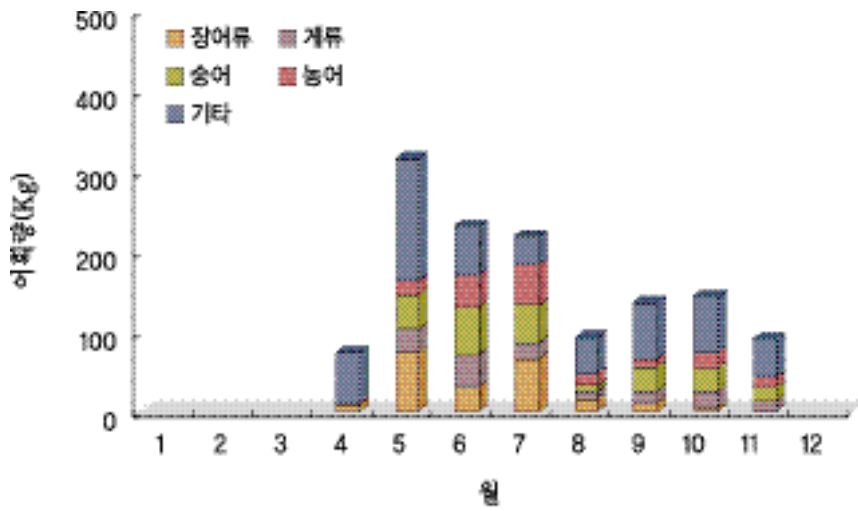
1998 65 , 2003 55



2-153.

가

()



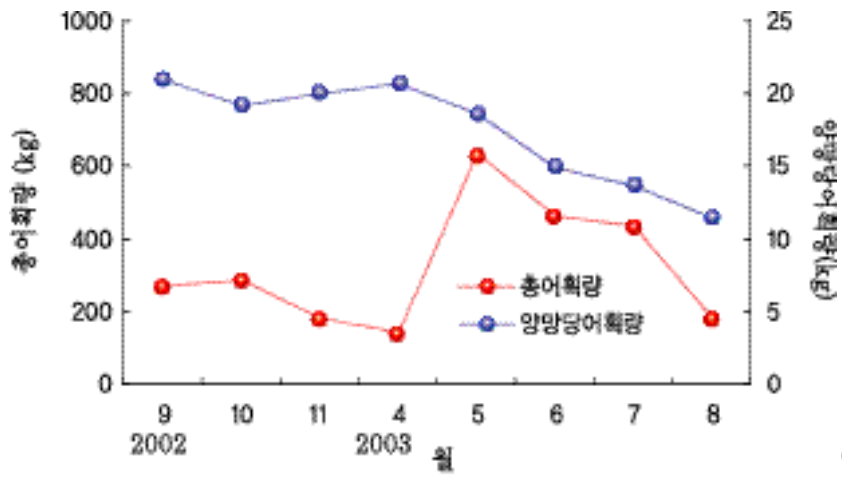
2-154.

()

2003

5

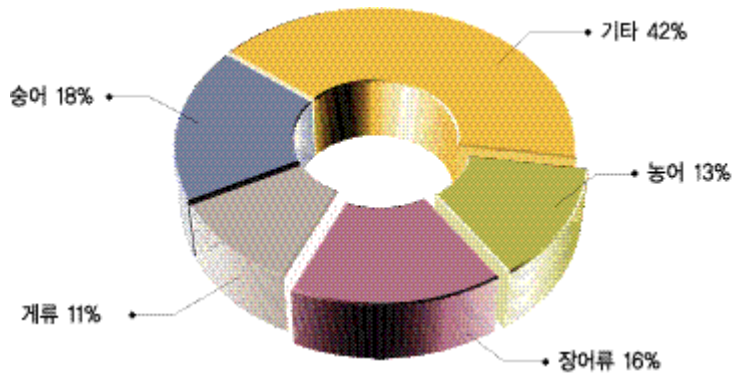
0.35 가 , 4 0.1 가 . 12~3



2-155.

(CPUE)

2002 9 가 , 2003



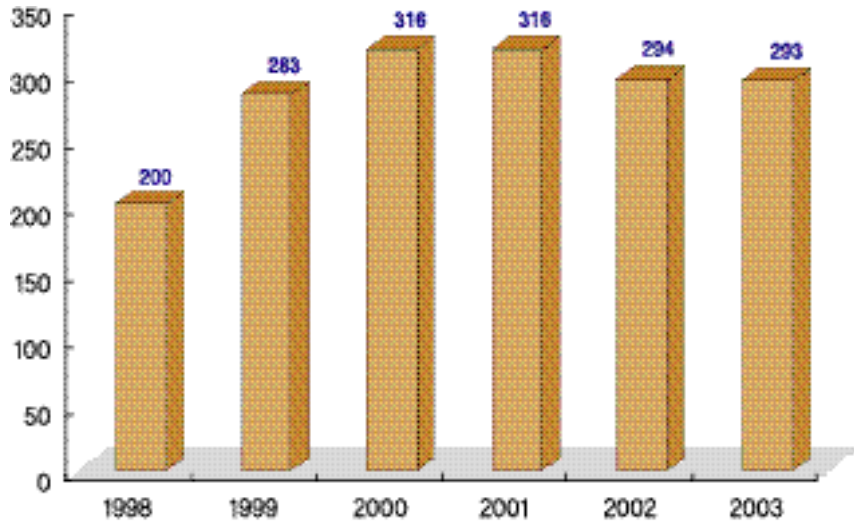
2-156.

, 가 가 18%

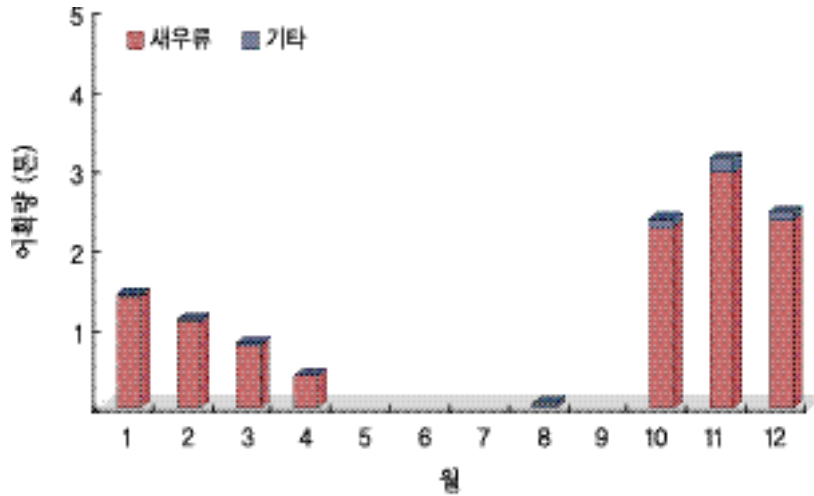
16%, 13%

)

1998 200 , 1999 283 , 2000~2001 316
 , 2003 293 .

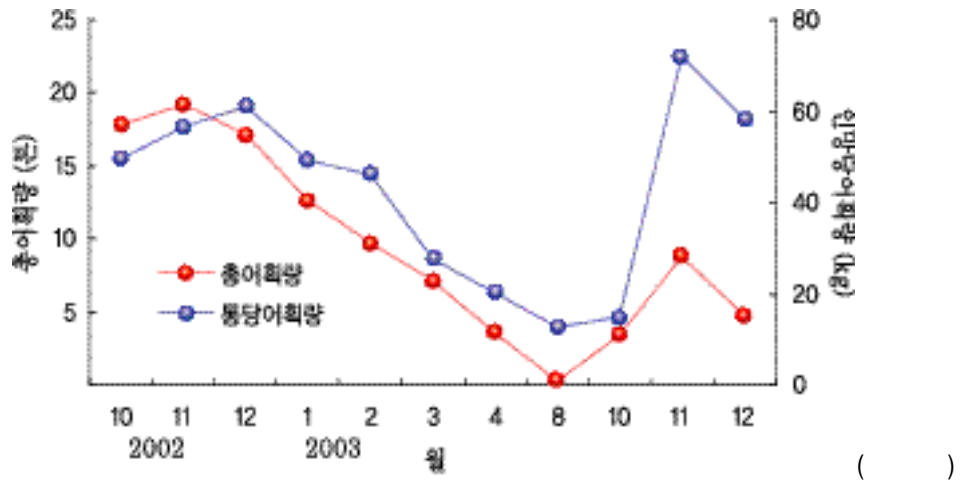


2-157. 가 ()



2-158. ()

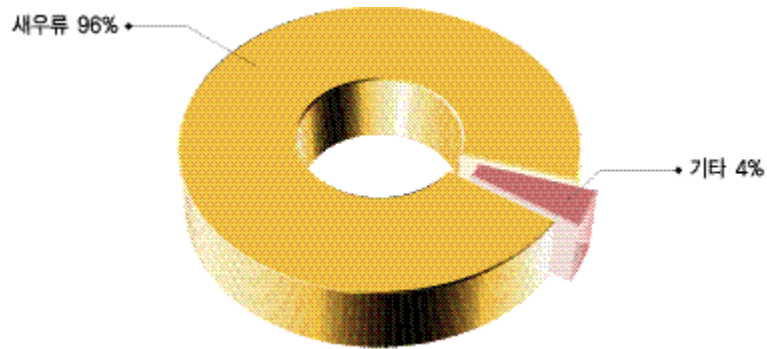
2003 11
 3.5 가 , 8 . 5~7 , 9 .



2-159.

(CPUE)

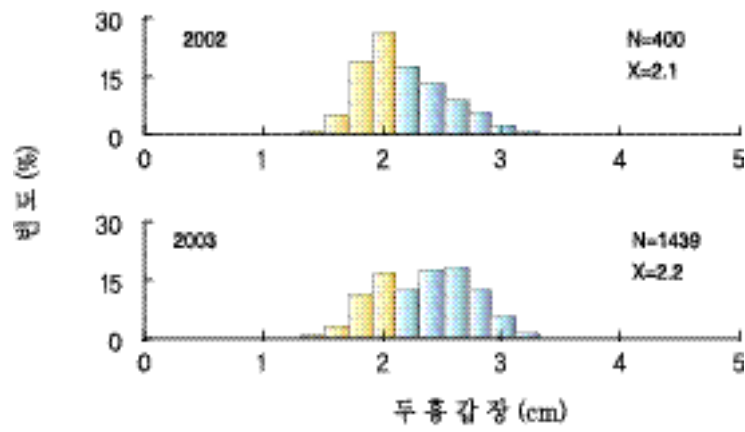
2003 11 가 , 2003 8 가



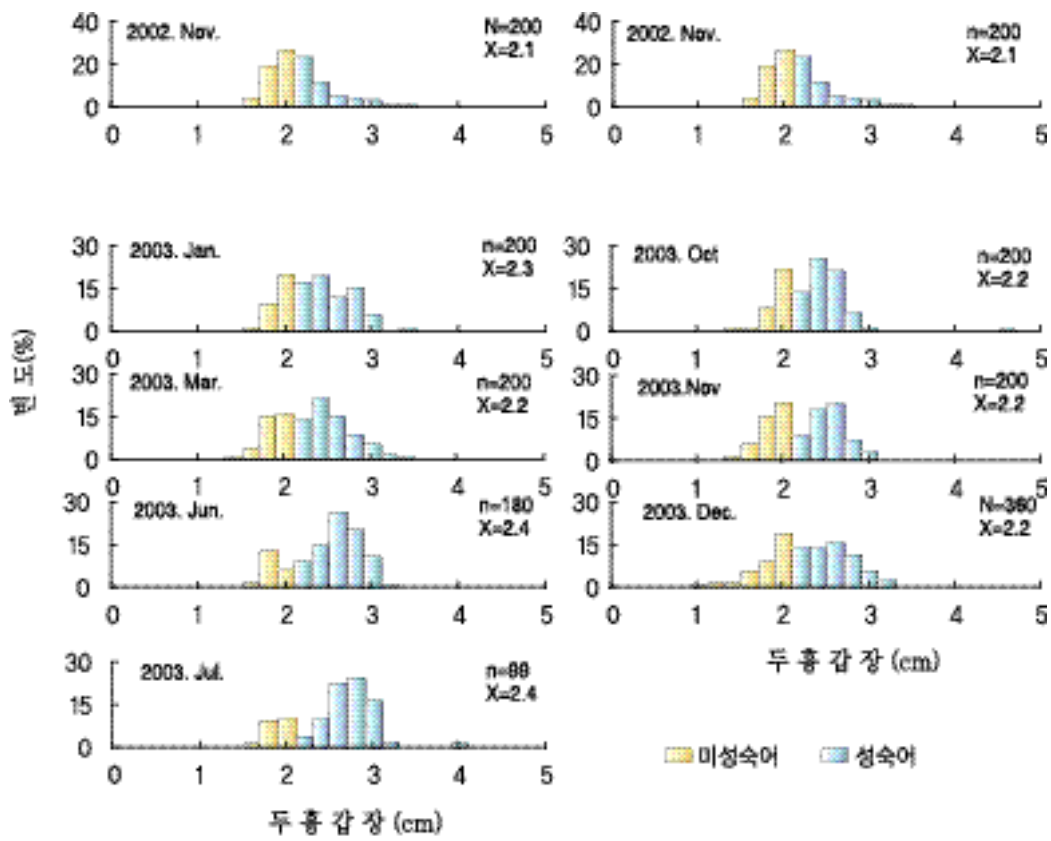
2-160.

가가 96%

() , 2002 5~8
 () 2.1cm (400) , 2003 2.2cm(
 1,439) .

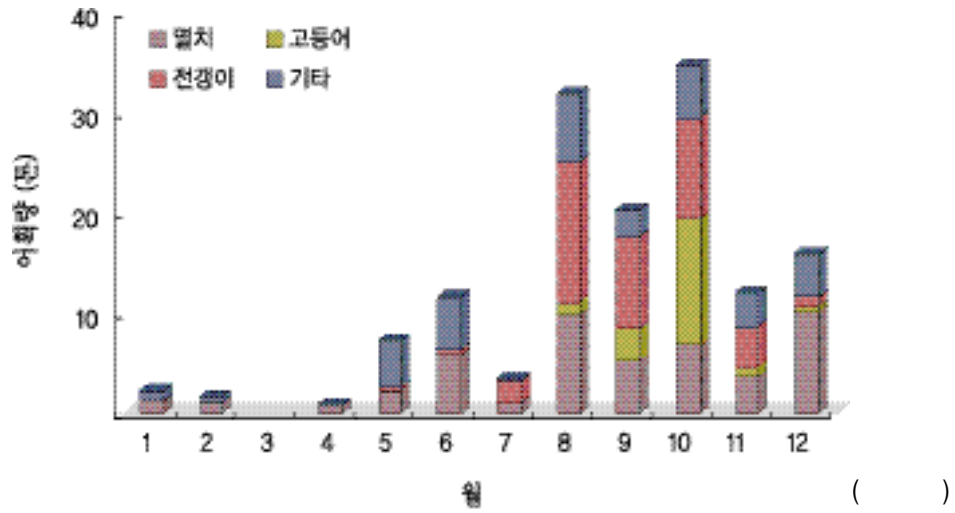


2-161.



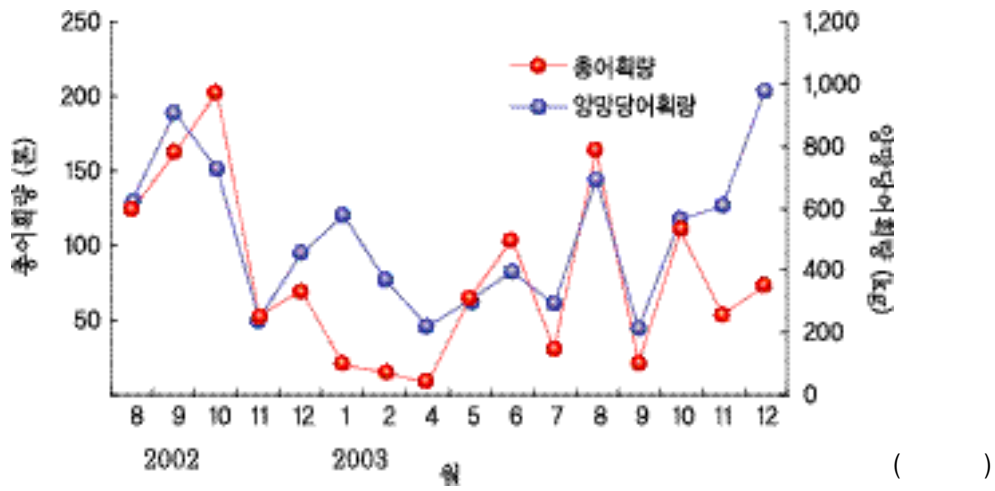
2-162.

4)
가)



2-163.

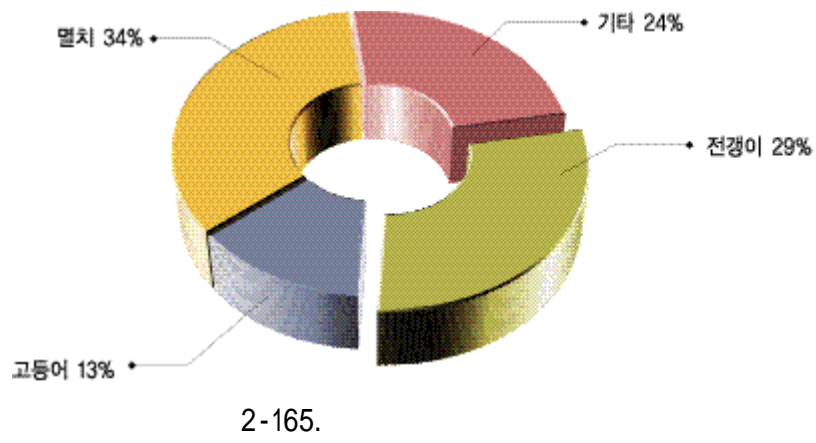
2003
35 가 , 1~4 . 3 8 10



2-164.

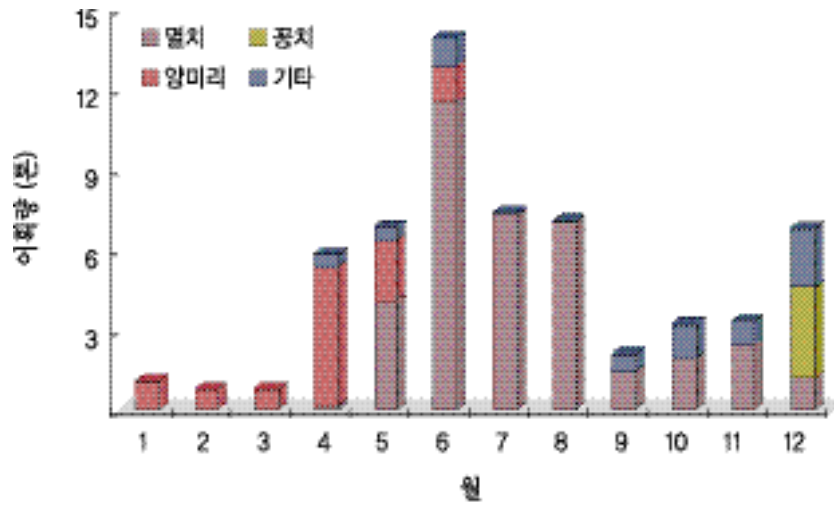
(CPUE)

2003 12 가 , 2003 4 9 가



29%, 13% . , 가가 34% ,

)



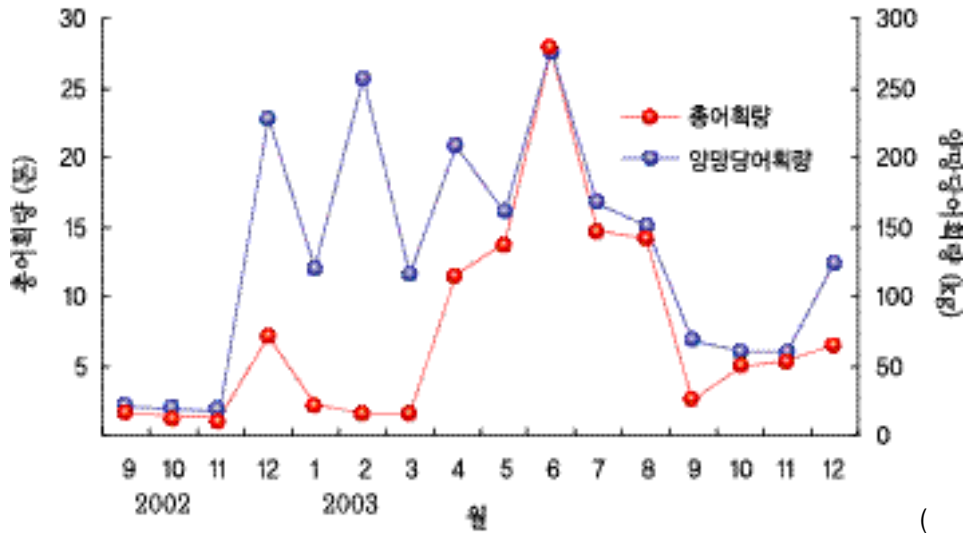
2-166.

()

2003

6

15 가 , 1~3

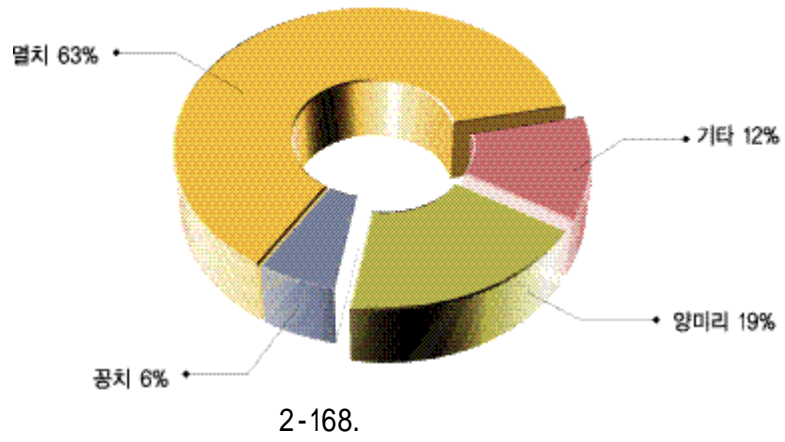


2-167.

()

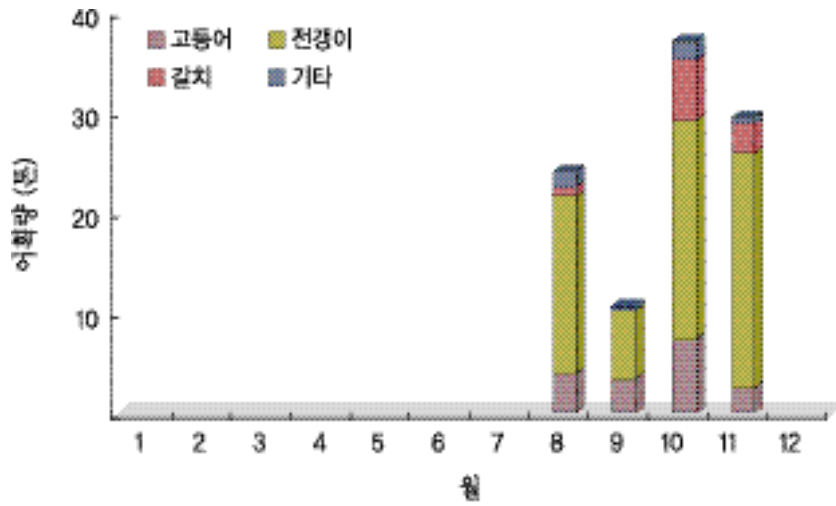
(CPUE)

2003 6 가 , 2002 12



19%, 6% . , 가 가 63% ,

)

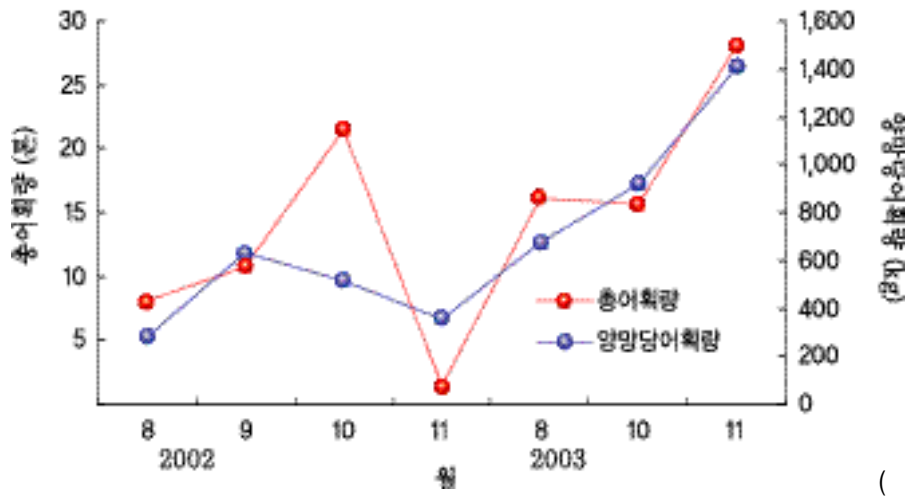


2-169.

()

가 , 9 가 . 1~7 , 12

10 40

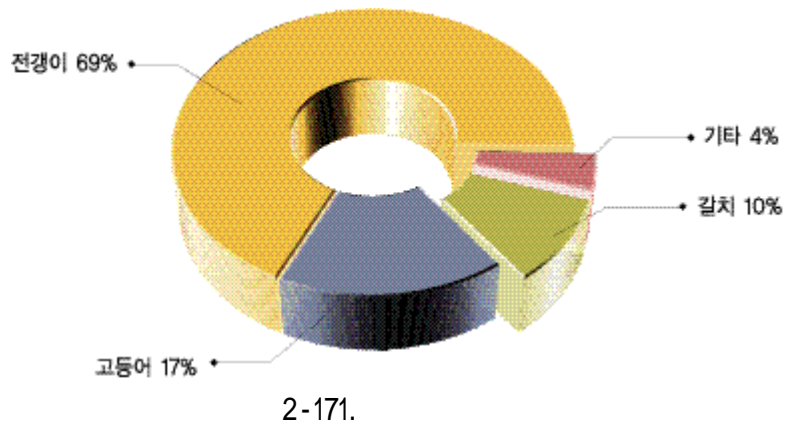


2-170.

()

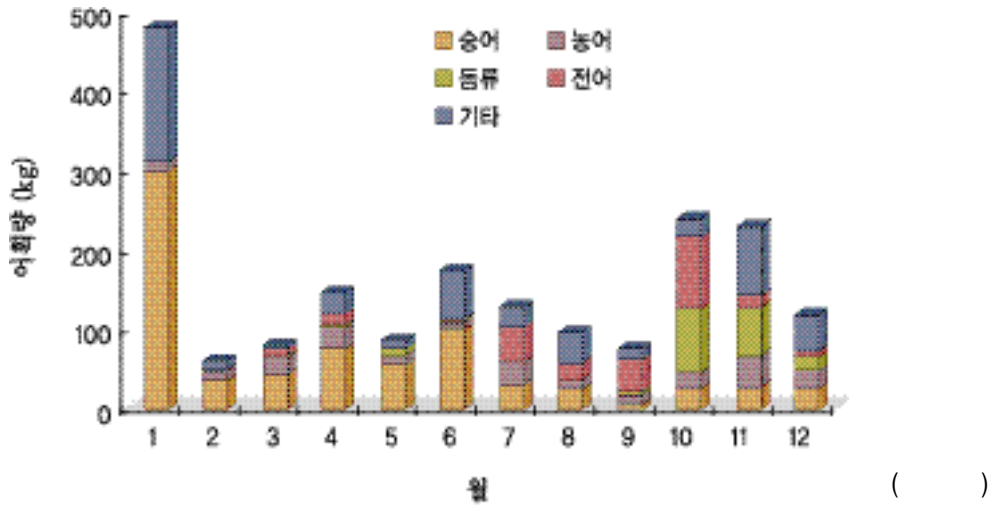
(CPUE)

2003 11 가 , 2002 8



2-171. , 가가 69% ,
 17%, 10% .

)



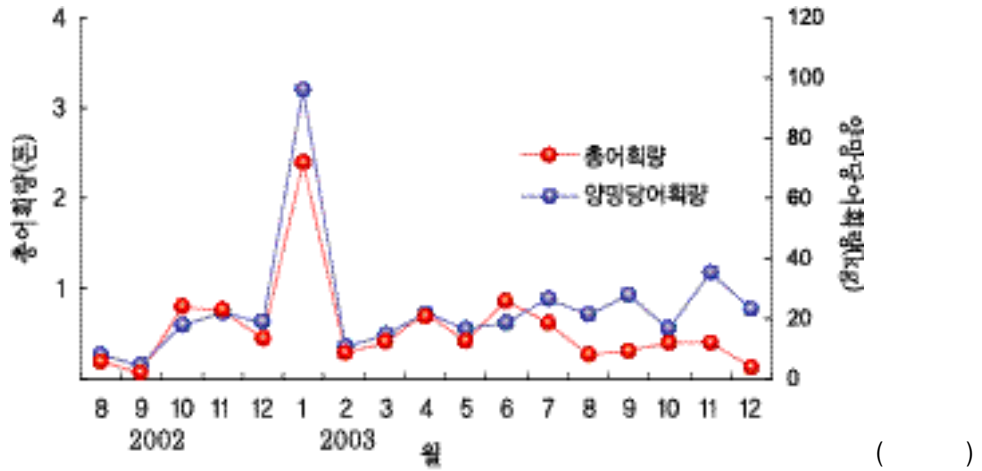
2-172.

2003

1

0.5

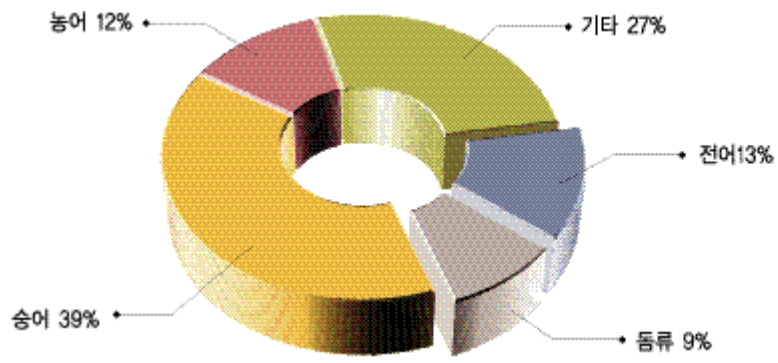
가



2-173.

(CPUE)

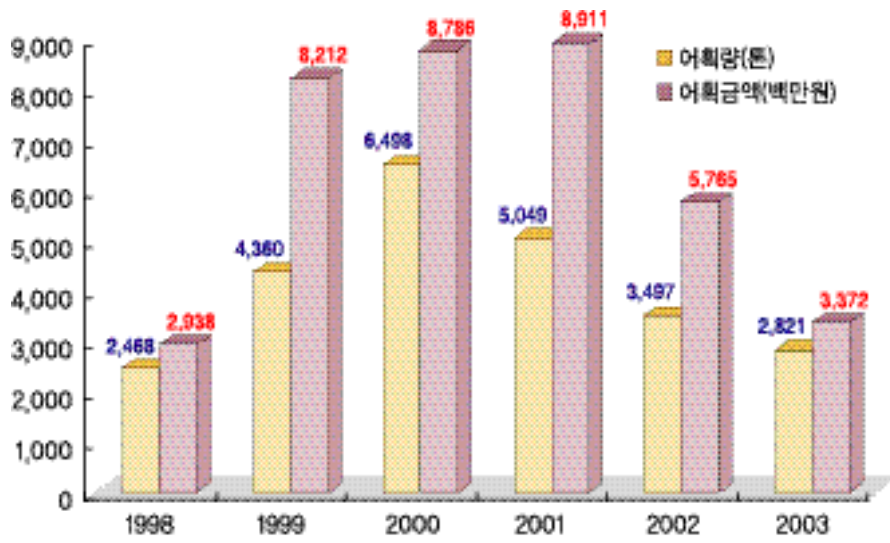
2003 1 가



2-17.

13%, 12%, 9% . , 가 가 39% ,

5)



2-175.

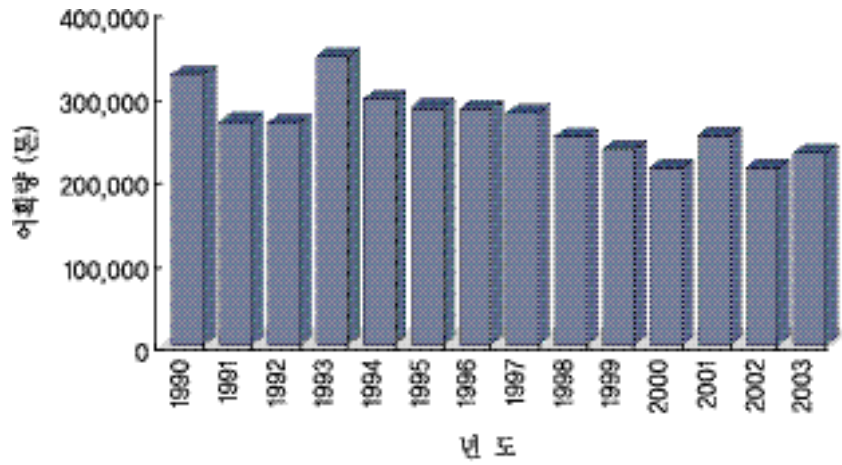
()

, 1998 2,468 가 , 2000 6,498 가
 , 2003 2,821

35 , 3

2-1.

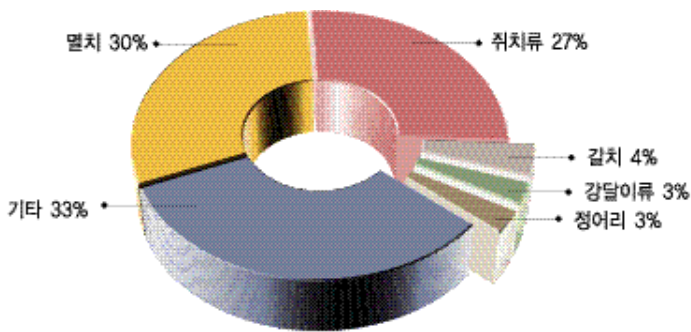
(kg)																			
2002		335	5	5,560	5,440														120
2002		19	44	940			206			147		137							450
2002		64	150	30,000		12,000	2,500	2,500		5,500								6,000	1,500
2002		109	6	1,500															1,500
2002		21	15	10,530	1,000														
2002		142	10	1,000															
2002		21	30	545					545										
2002		86	180	1,280					1,280										
2002		59	45	133					133										
2002		47	180	8,724					8,704										20
2002		43	35	5,000		2,000												3,000	
2002		53	40	9,000		5,000	2,000												2,000
2003		217	15	16,658		15,300													1,358
2003		106	628	3,969			377		347	413		216			466	2,150			
2003		365	55	45,551	1,200	36,720	174			2,300		70		4,550			77	460	
2003		45	176	3,300		1,310				360				1,180					450
2003		277	56	194,500	184,000	10,500													
2003		20	20	2,800	2,800														
2003																			
2003																			
2003		40	2	1,000				1,000											
2003																			
2003		50	2	1,000				1,000											
2003		70	82	13,960		1,350		9,000			2,200							110	1,300
2003		70	56	13,720		10,600		2,170							550				400
2003		67	15	1,800				700								650			450
2003		55	60	28,500		600		5,600			17,500								4,800
2003		104	560	2,640			1,450					1,190							
2003		60	262	700			100		100			500							
2003		66	180	1,600					1,000			600							
2003		41	24	15,000		15,000													
2003		68	60	2,500		2,500													
2003		30	150	1,200					800			400							
2003		50	24	3,500		1,500									2,000				
2003		65	180	600							600								



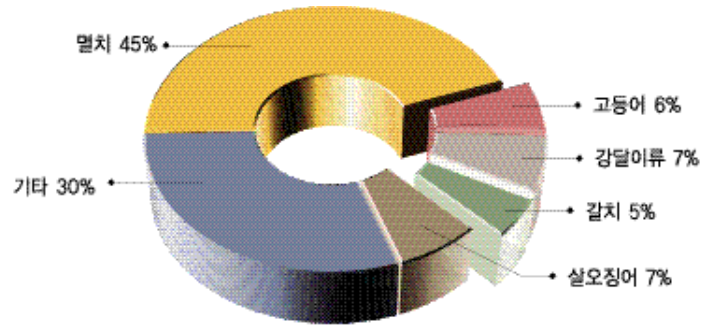
2-176.

1990 2003 1993 344,481 가
 , 2000 211,152 가 . 2002 2003
 212,453 , 228,827 (265,528)

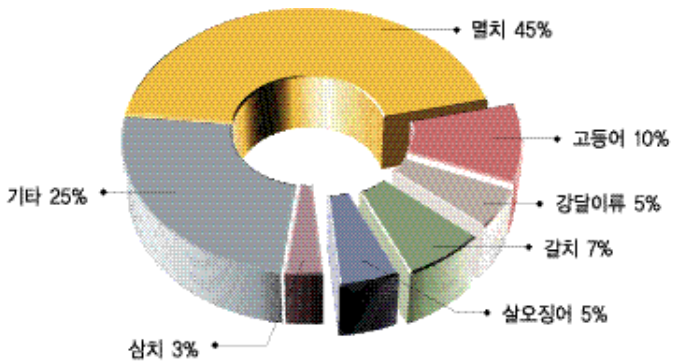
1)



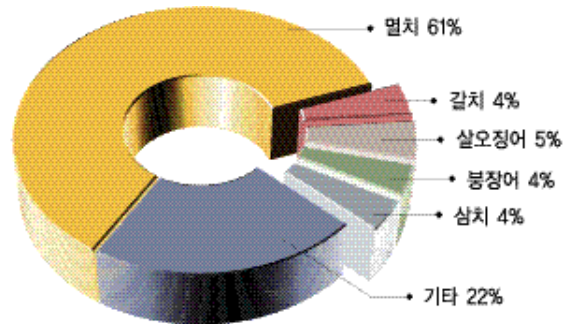
1990



1995



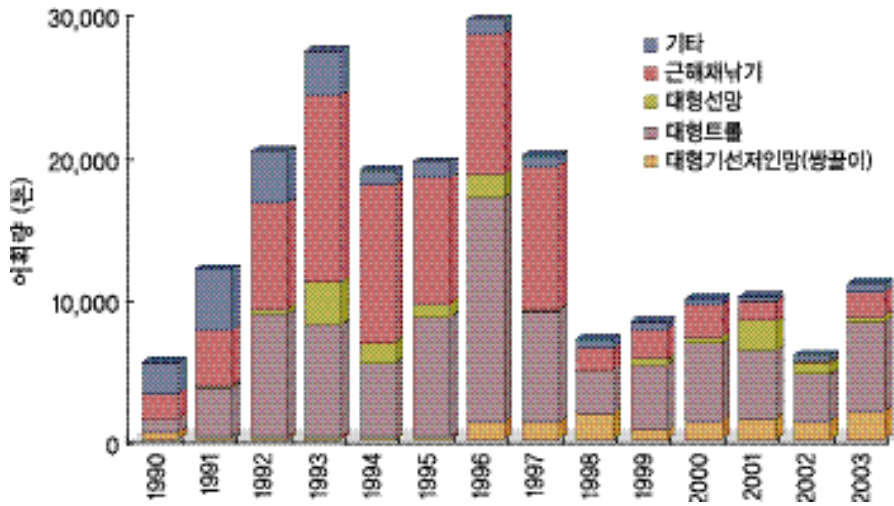
2000



2003

2-177.

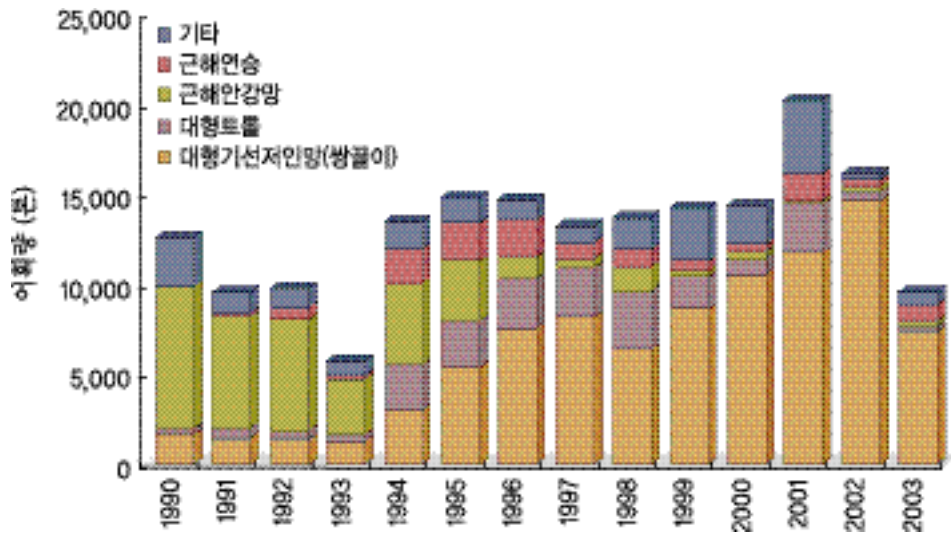
)



2-179.

가 . 1990 가 , 1990 5,423
 32%, 17%,
 11%, 40% . 2003
 57%, () 18%, 15%, 4%, 6%
 가

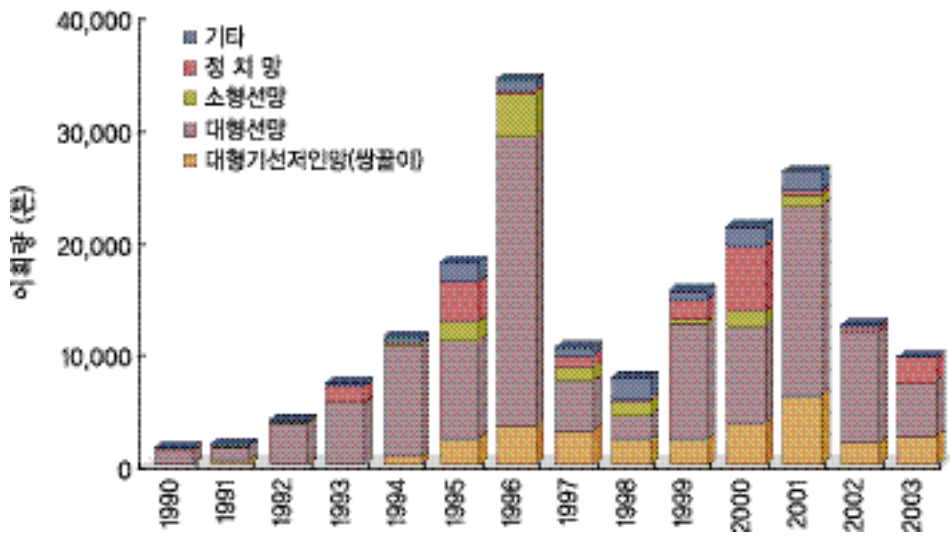
)



2-180.

2001 20,165 가 , 1993 5,708 가 .
 1990 63%, 14% .
 1991 1996 65%,
 64%, 53%, 34%, 22%, 9% , 1998 5%
 () 1990 14% 2002 91%
 가 , 2003 76% .

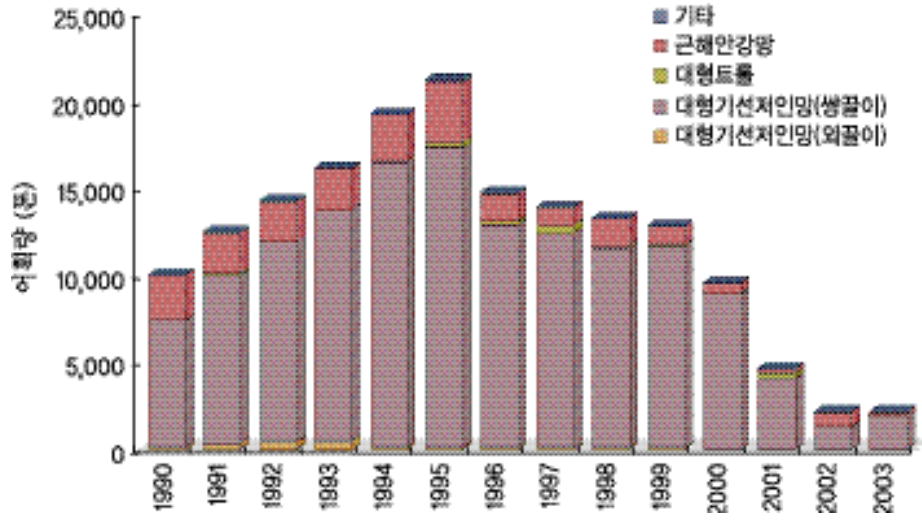
)



2-181.

1996 34,247 가 , 1990 1,485 가
 . 1990 75%, 12%,
 6%, () 5%, 2% .
 1994 88% 가 2003 50%

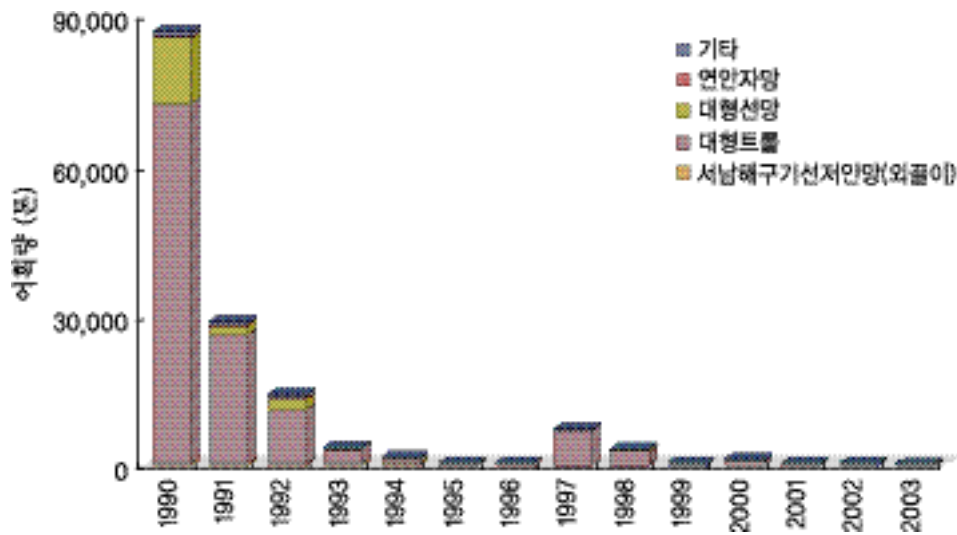
)



2-182.

가 . 1995 21,161 가 , 2003 2,119
 84%가 ()
 , () .

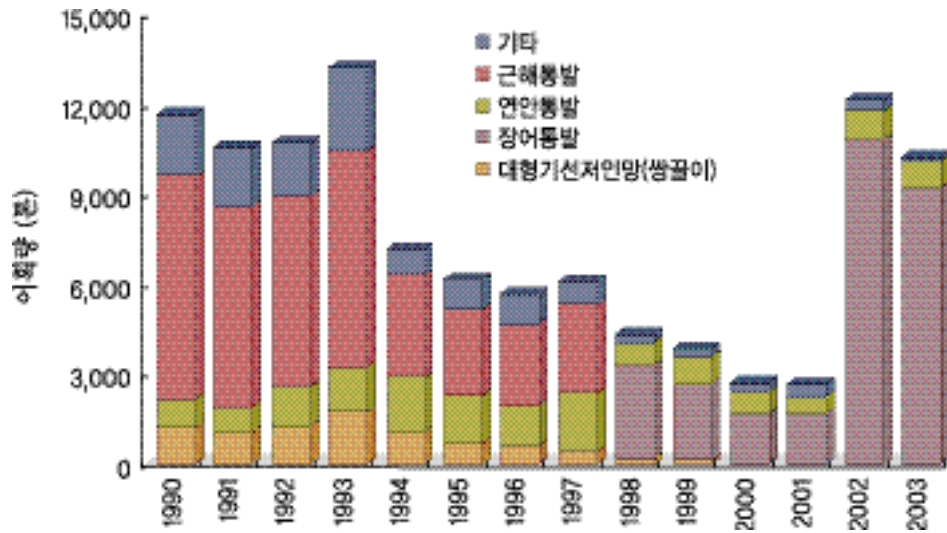
)



2-183.

1990 1990 86,735 가
 , 1995 1996 256 , 207 . 1997
 7,249 130
 . 1990 83%, 15%

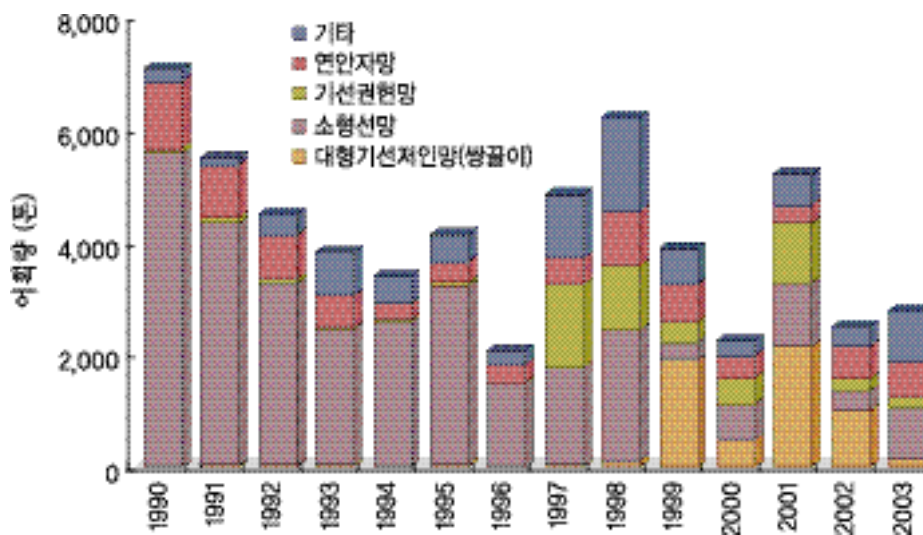
)



2-184.

1993 13,205 가 , 2001 2,588
 가 . 1990 64%, ()
 10%, 8%, 18% .
 1998 , 2003
 90%, 8%

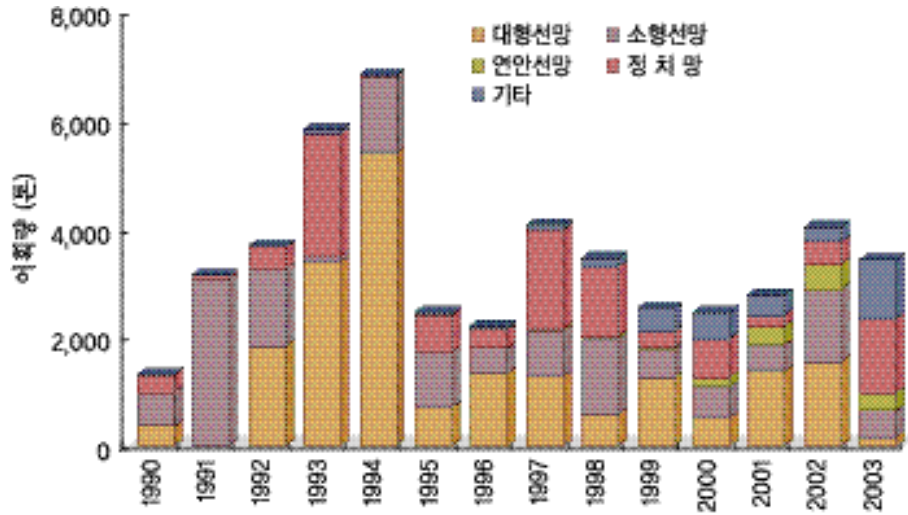
)



2-185.

1990 7,059 가 , 1996 2,027
 가 . 52%, 15%, ()
) 10%, 9%, 14%가 .

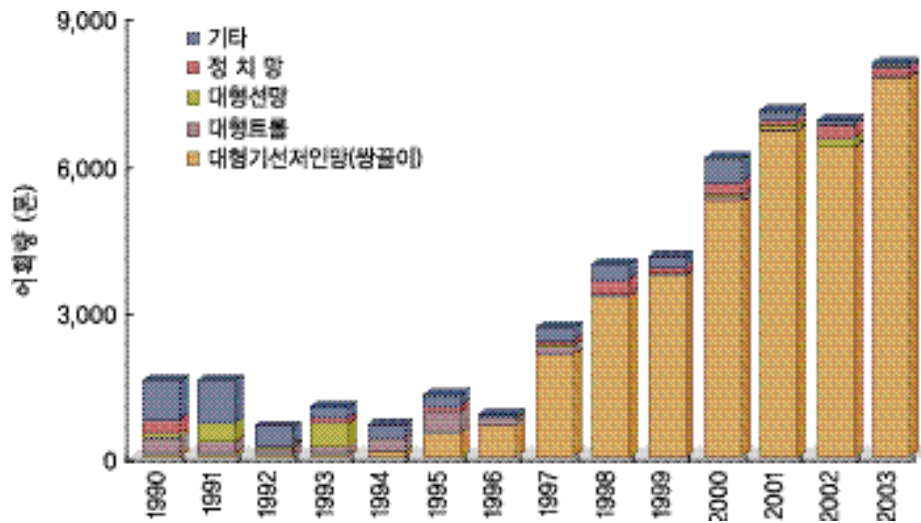
)



2-186.

가 . 1994 6,831 가 , 1990 1,277
 41%, 29%, 21%,
 3%, 6%

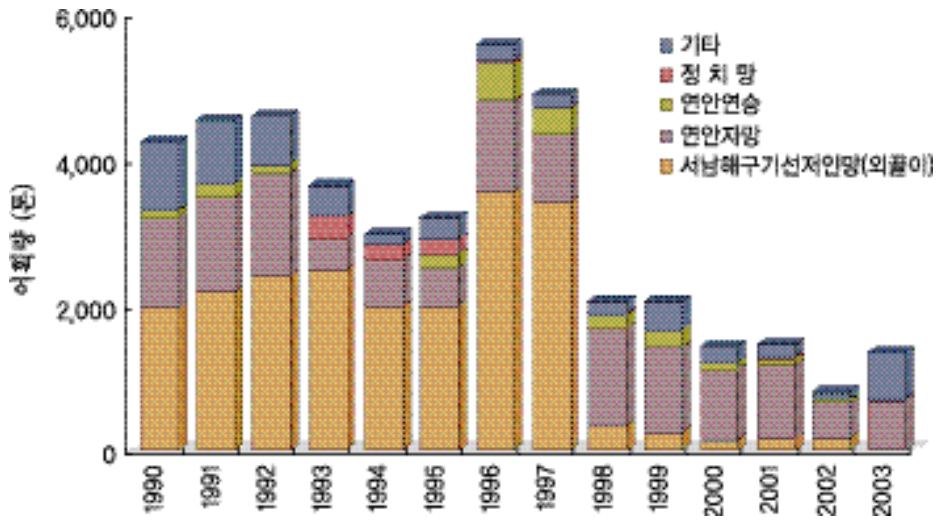
)



2-187.

1990 1990 1,547
 가 1996 가 2003 8,042 가 .
 1990 20%,
 () 5% . 2003 ()
) 96%, 2%
 () 가 .

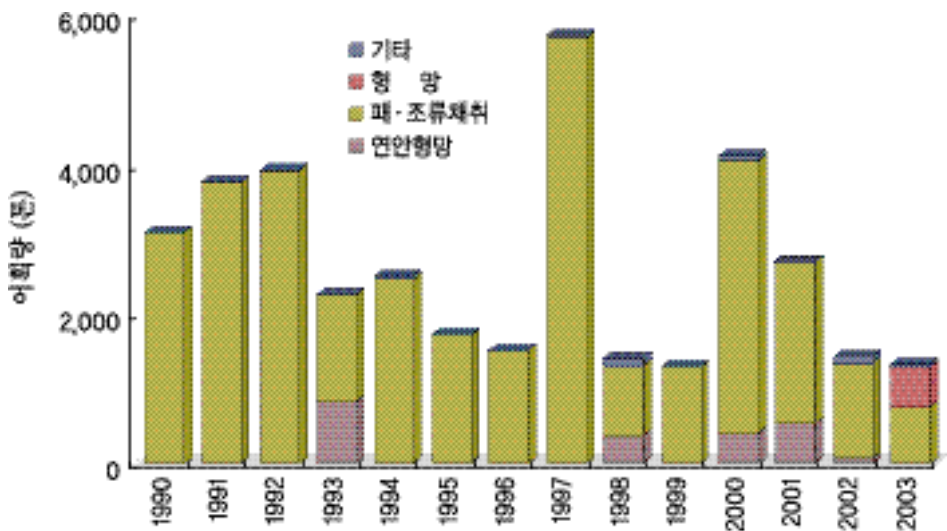
) 가



2-188. 가

가 1990 가 1996 5,552 가 , 2002 799
 가 () 47% 가
 1998 2002 22% , 2003
 가 2003
 52%

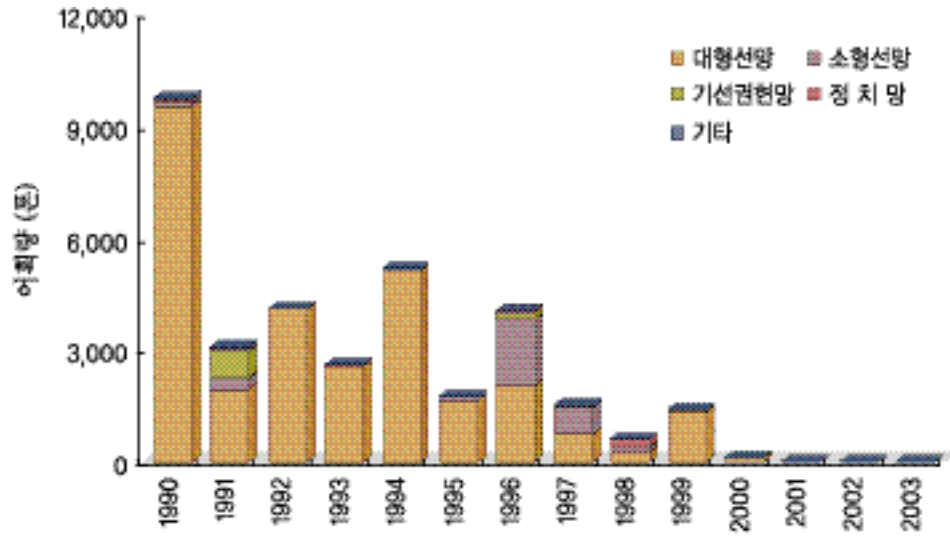
)



2-189.

1990 1997 5,740 가
 , 1999 1,295 가
 91%

)



2-190.

1990 1990 9,723 가
 , 2000 2003 .
 86%, 9% , ,

[3.]

가.

1)

, 가 , , , , , , , , .

3-1.

가		吳 吳		吳 吳	吳 吳

(吳 : , :)

1)

3-3.

		()	()	()		
					,	
	,	(9~6)	10	6~7	18~19 160 /	70
		7~2	30	20~23	140~160	1
	,가 ,		80	10~14	50mm	1
		4~12	50~100	10~12	35mm	10~12 (40 /)
			30~70	10~12	7.45mm	10,000
		9~6	30	6~8	30~40 /	12~20

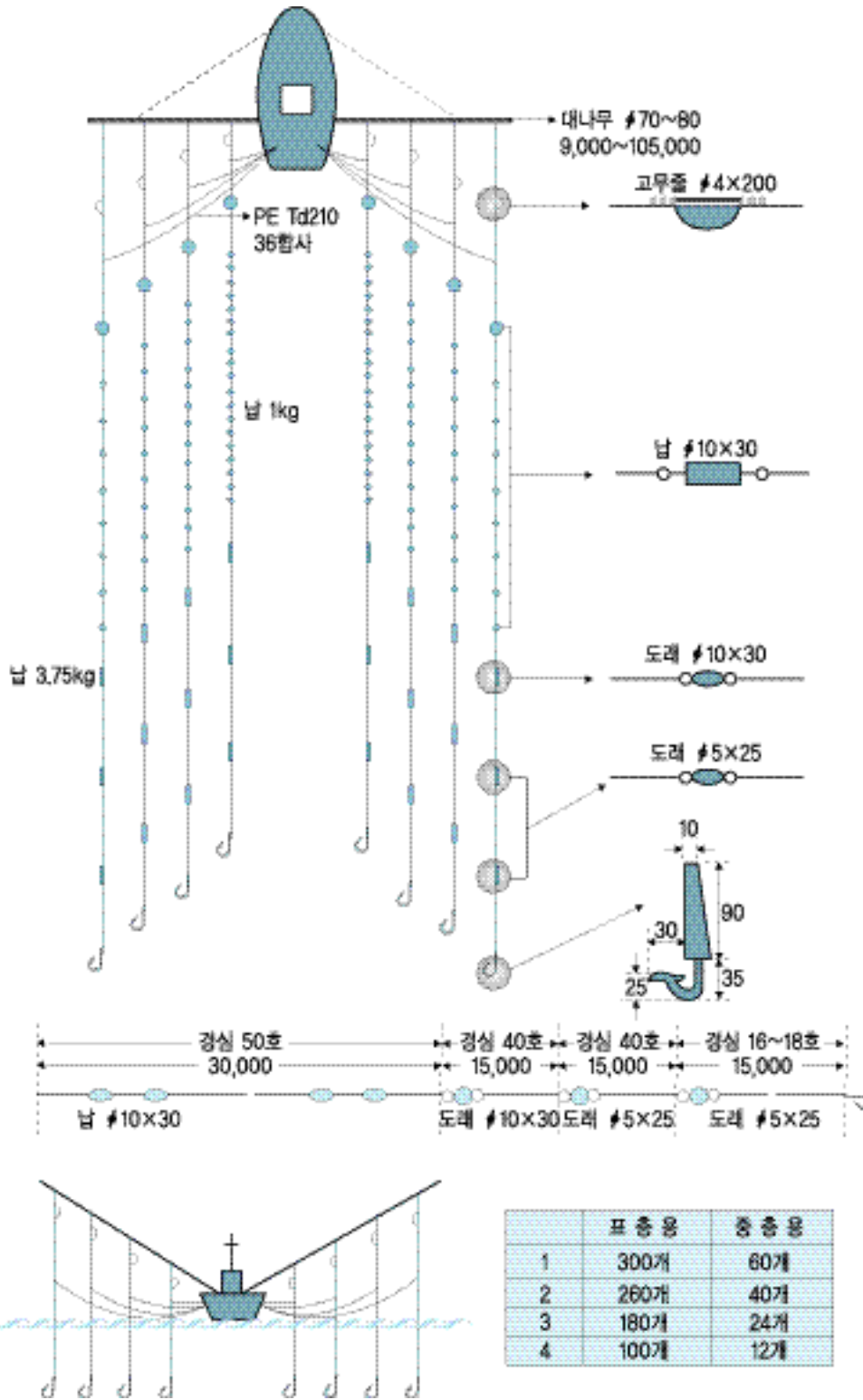
2)

3-4.

		()	()	()		
					,	
	, , ,	4~11	0.3~3	1~2	15~35mm	80~300
		11~2	0.3~3	1~2	74mm	700
		8~11	1	1~2	48mm	24
	() 가	6~10 11~2 3~10 3~9, 9~11	0.5~1	1~2	38mm 95mm 86~101mm 50mm	30 30~40 30 8
		(1~5)	0.5~4	2	56.5mm	25~30
		2~10	2~3	2	130mm 80~100 /	700~1,600
		9~11	5	1~2	35mm 6~8 /	8
	,	4~11	1	2	32mm 1 /	1 /
	,	12~5	1	2	13 170~200 /	5~7
		5~11	0.5~5	1~2	70~135 /	15~30
		10~12	0.5~1	1~2	120 /	50~60
		11~4	0.5~1	1~2	300~400	300~400
	, ,	7~11 12~2	8	14~15	140 , 20~38mm	1
	, , , ,	6~4	1~10	2~4	30mm	1
	,	3~12	1~2	2	12.6mm	2
	,	6~7	5	2~3	50mm	2
2	, ,	3~8	2	2	18~51mm	1 (0.3ha)
		9~10	2	1~2	35mm	20~30

3)

가) ()



: 9~11

: 30~200m, ,

:

:

:

1

,

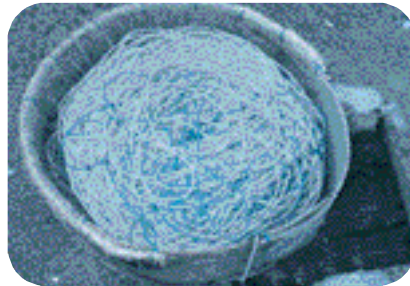
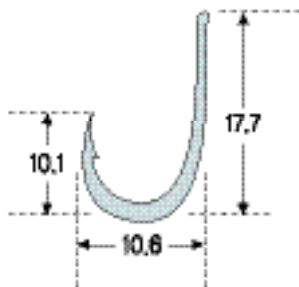
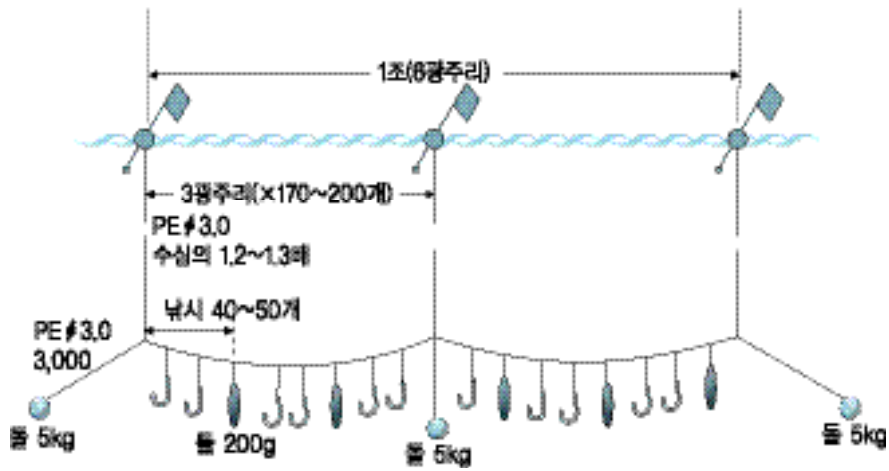
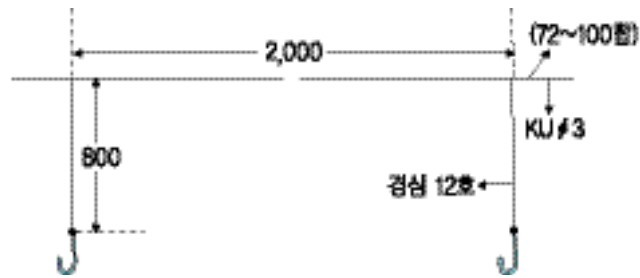
3 4

가

,

.

) ,



: 12~3 (), 3~5 ()

: 30~40m,

:

:

:

KU 3mm,

12

, 80cm,

2m .

4 5

, ,

가

.

50

,

.

1

5~7

, 170~200

1

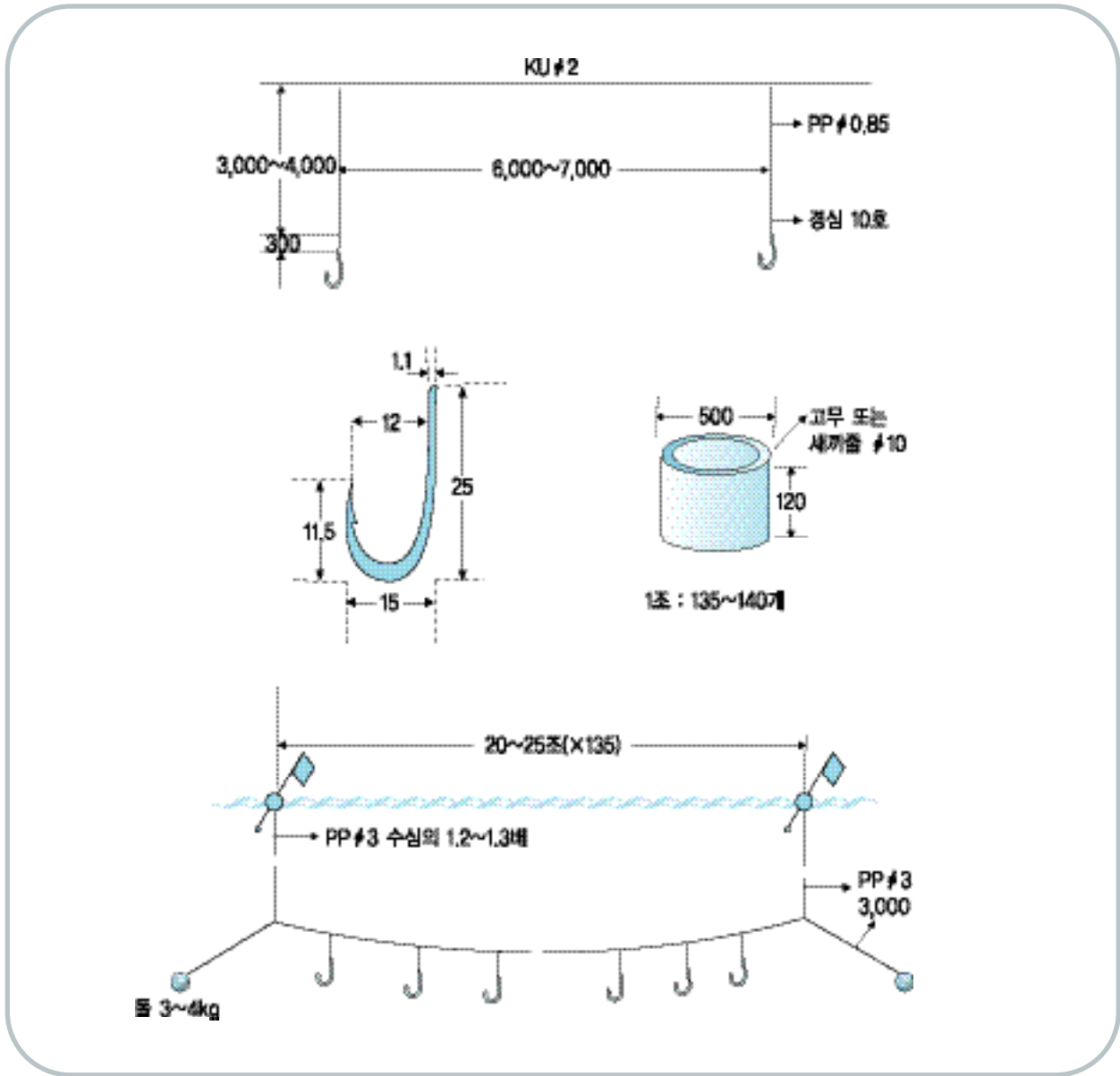
.

7~10

가

.

)



: 5~11

: 30~40m,

:

: , 가 ,

5~7

, 8~11

2

. 135~140

1

20~25

. 1 1

, 1

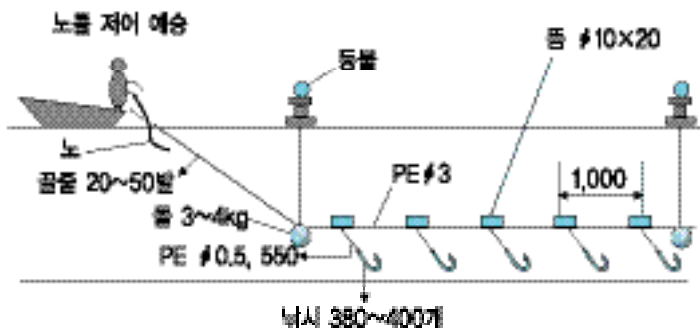
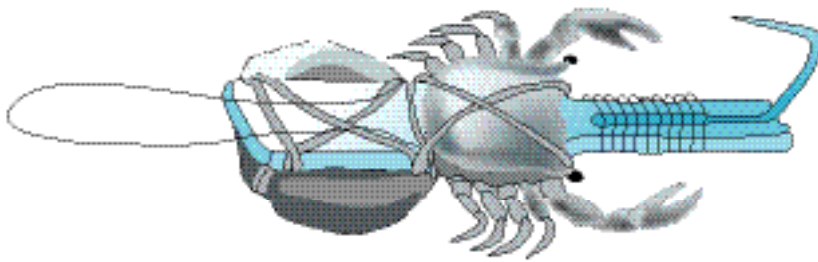
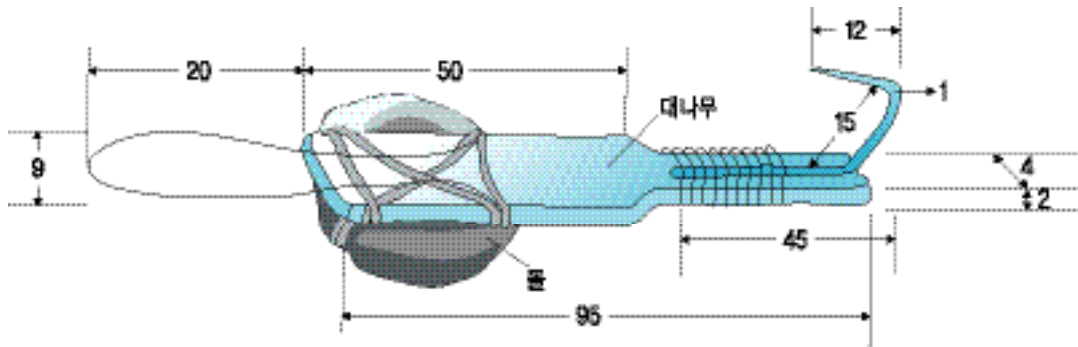
5~10 ,

25~30

.

가 .

)



: 11 ~ 4

: 20~70m, ,

:

:

PE 0.5mm , 1m .

380~400 .

가 ,

가 가 ,

30 가 가 .

가 ,

가 .

가 가

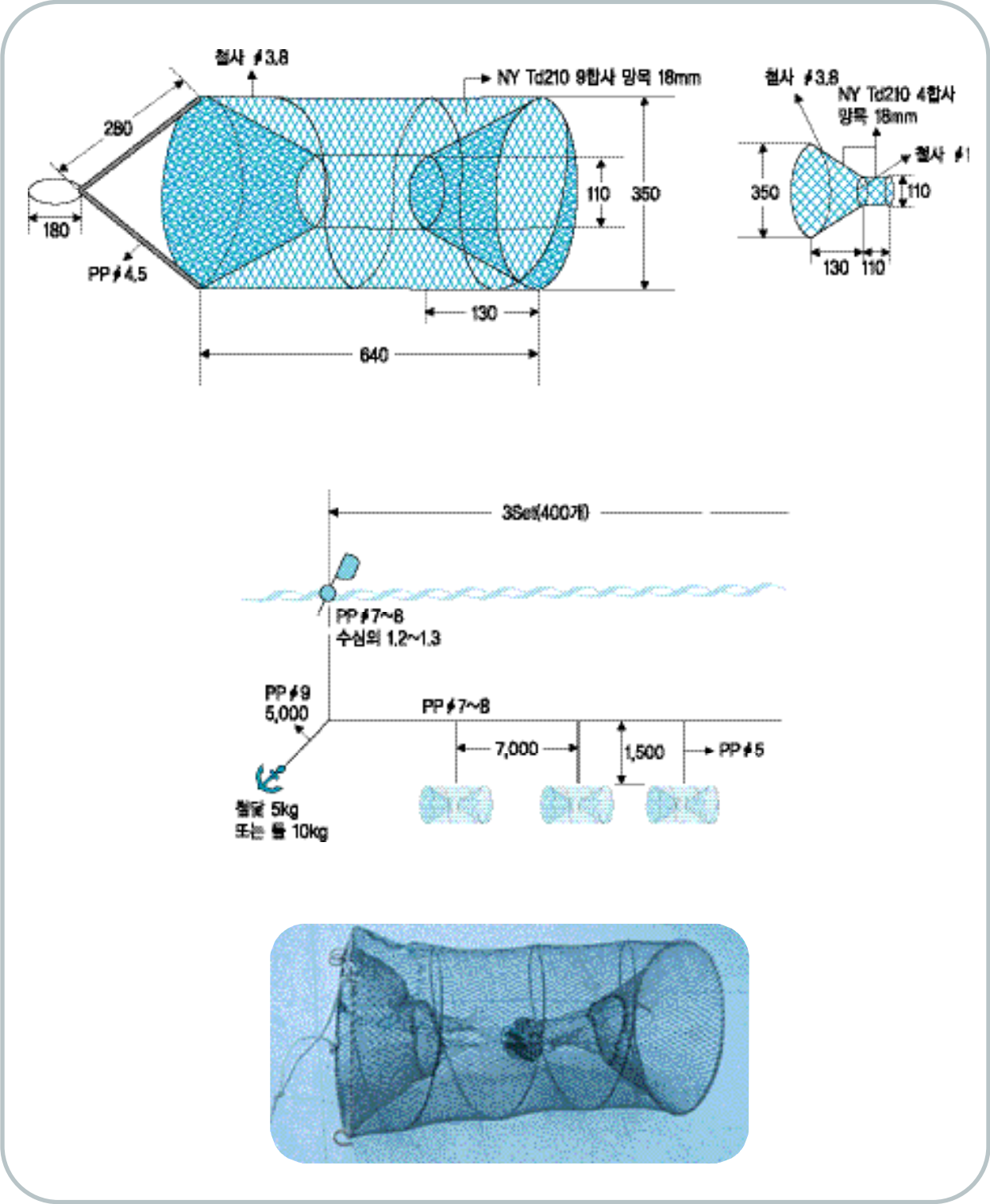
가

10 ,

가

)

(1)



: ,가 (,), (,)

: 20~30m, ,

: , , ,

:

:

4~5mm

,

.

,

.

5 6

.

200 250 1

1 2

1

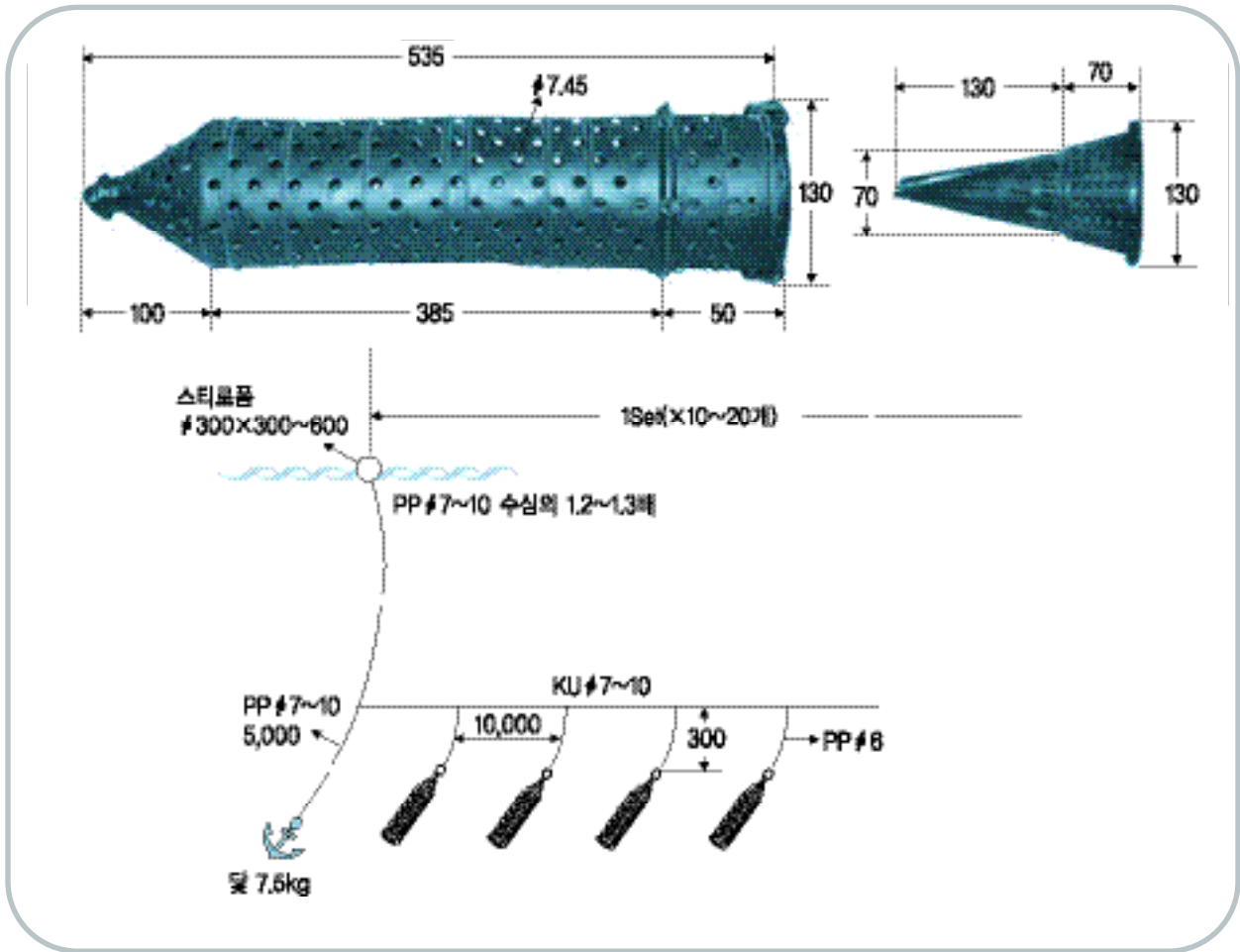
40 50 ,

1

30 2

.

) (2)



: (, 5 6)

: 20m ,

: ,

: , ,

:

. 4 5 ,

가 6 7

1 2

300 500

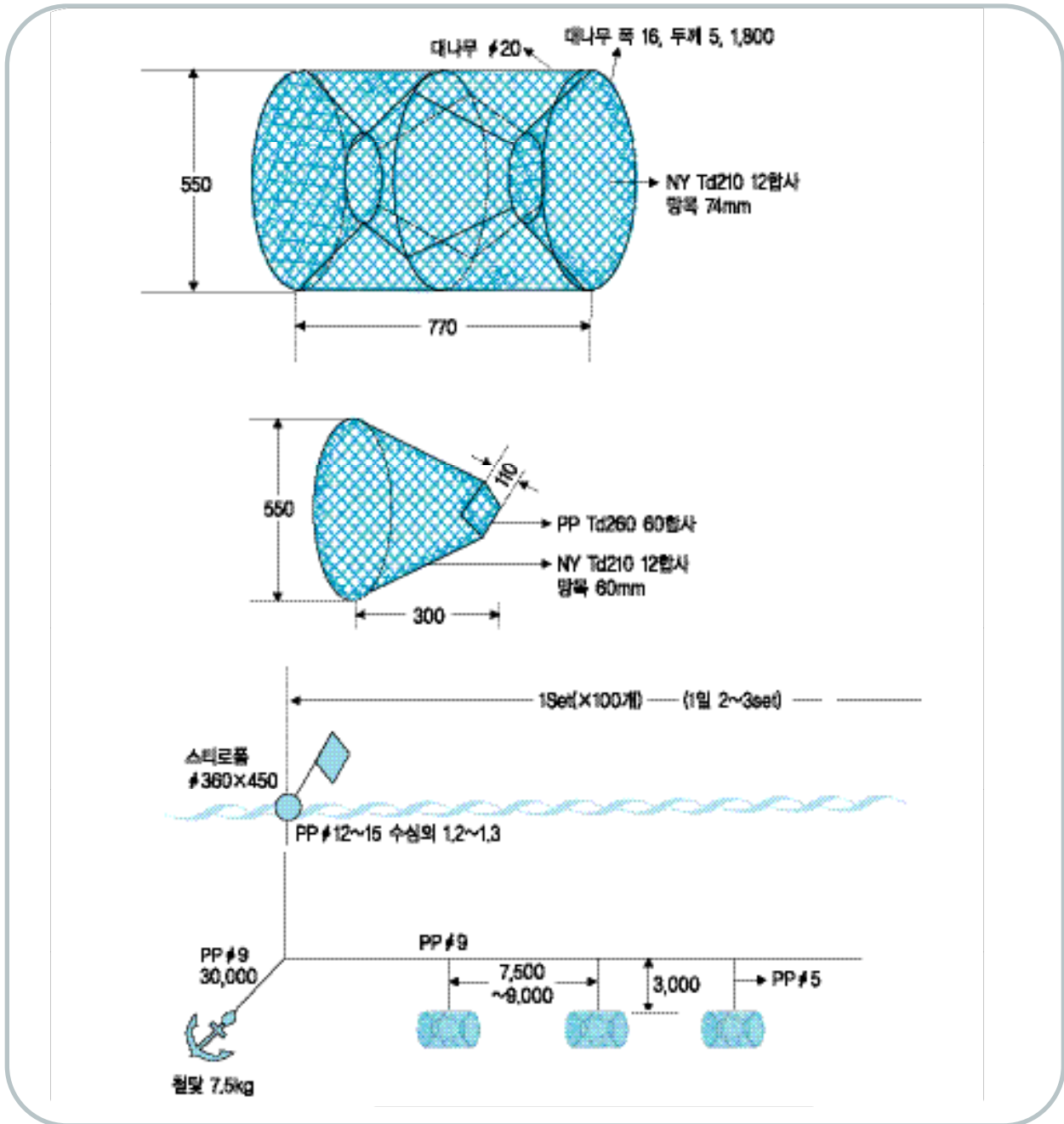
10m , 100 200

200

1 30 ,

1 .

)



: 11 ~ 1

: 15m ,

:

: -

7~8

150~200 1

, 1

2~6

. 1 1 .

, 1

20~30 ,

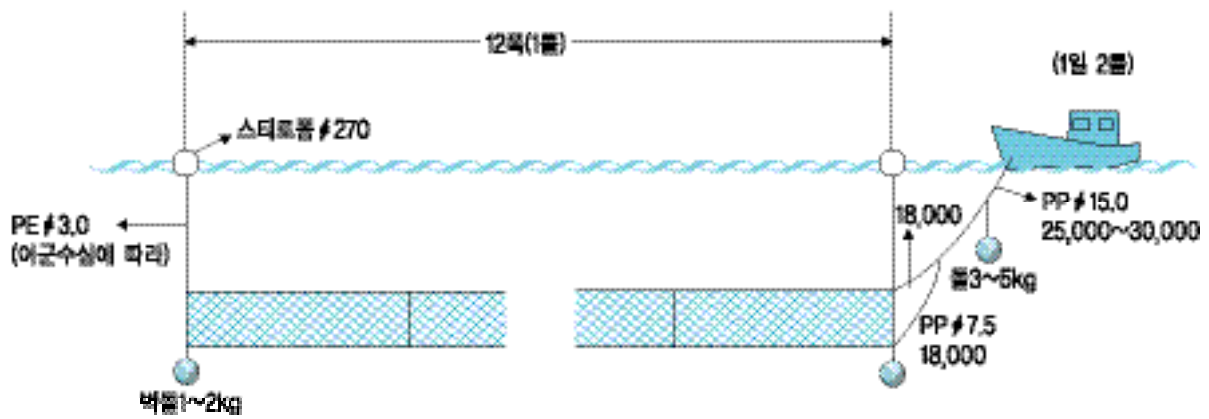
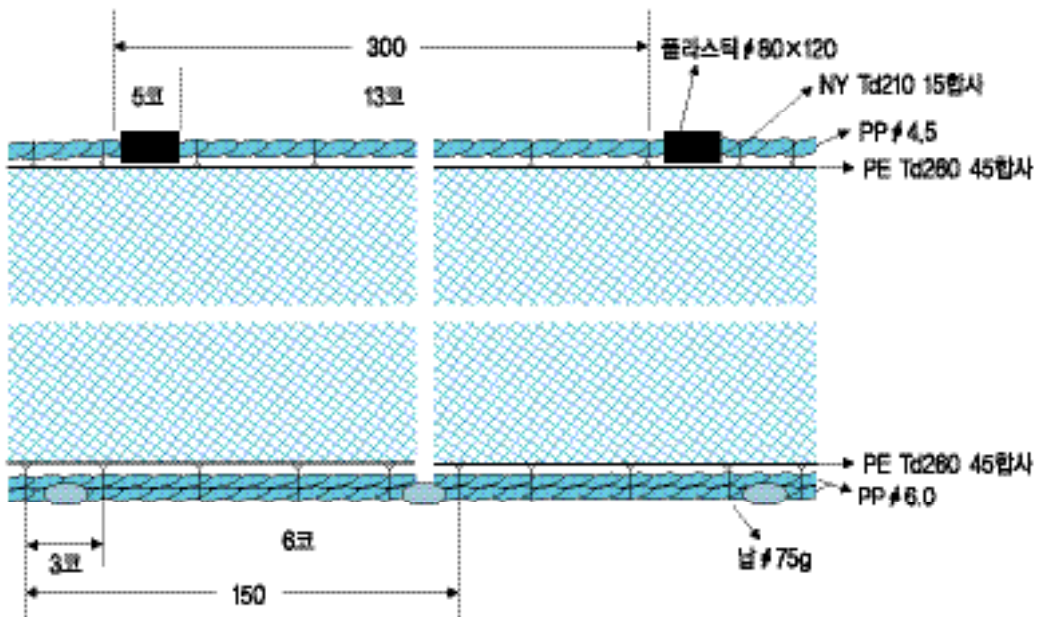
10~20 .

)

PP # 4.5 30,000

100코 또는 200코	Knot NY Td210 6합사 망목 48mm	180,000
--------------	---------------------------	---------

PP # 6.0



: 8~11 (), 6~10 (), 11~2 ()

: 10m ,

: , ,

:

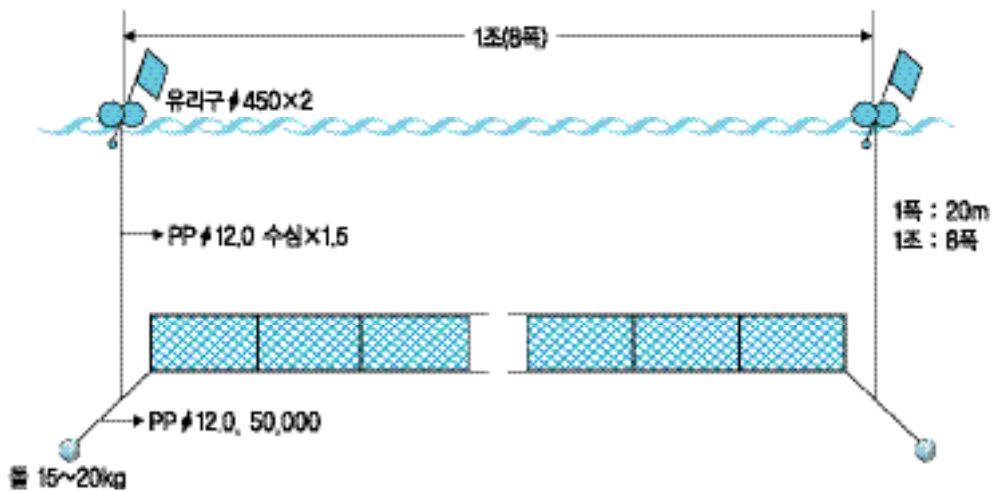
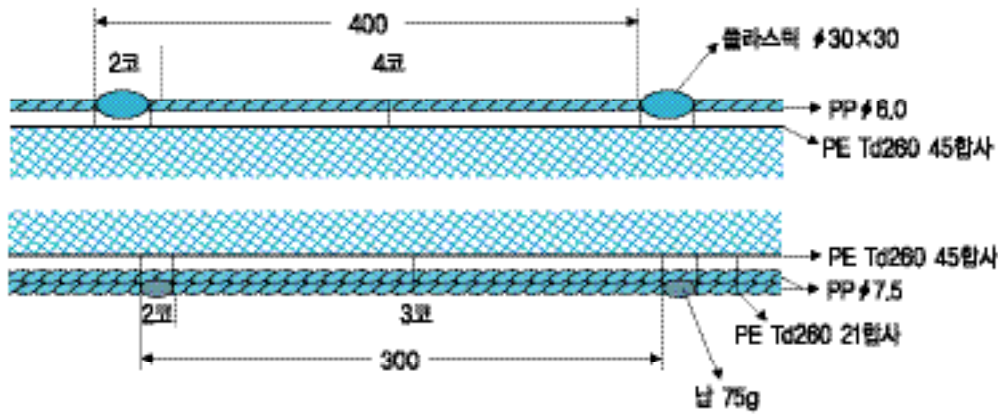
30m, 100 200 1 , 12 1

, . 가 . 1 2

, .

) 가

	PP # 6.0	97,500
33코	NY Td210 4합사 망목	
	Knot NY Td210 2합사 망목 50.6mm	151,500
	NY Td210 4합사 망목	
	PP # 7.5	90,000



: 3~6 , 9~11

: 20m, ,

: 가

4~5

2

1

20m 1

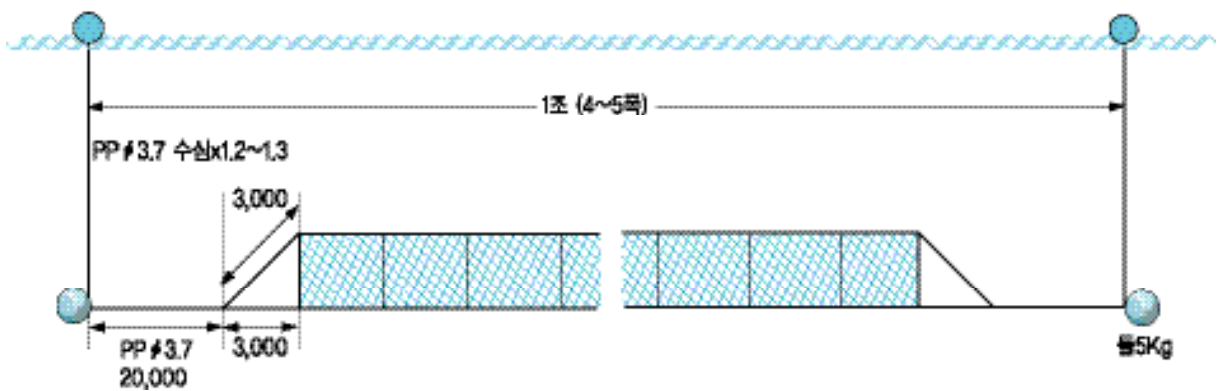
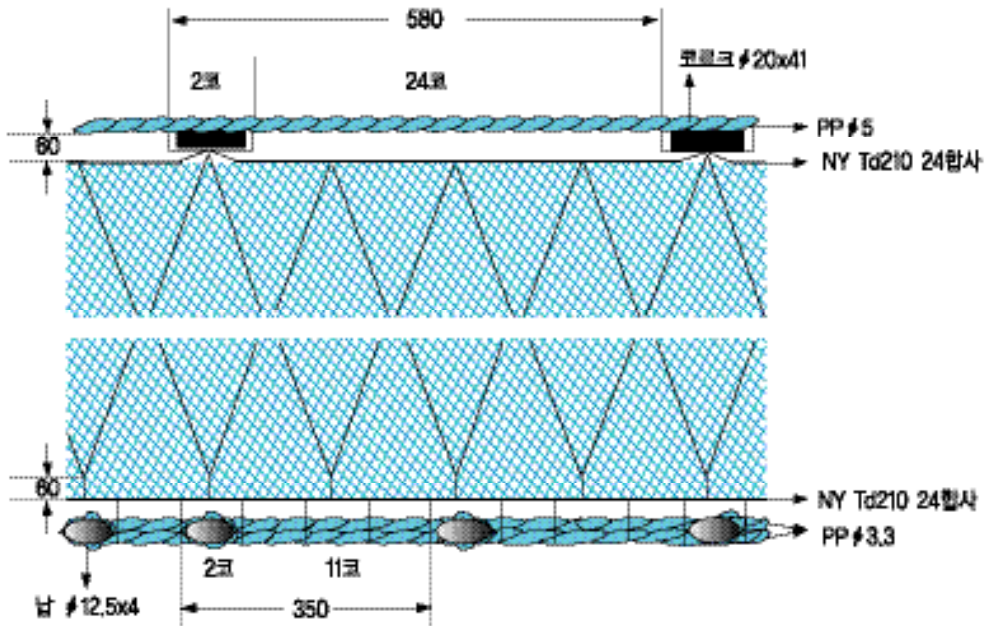
80~160

)

PP #5 45,000

3코	Knot NY Td210 6합사 망목 370mm	90,000
33코	Knot NY Td210 3합사 망목 65mm	105,000
3코	Knot NY Td210 6합사 망목 370mm	90,000

PP #3.3 54,000



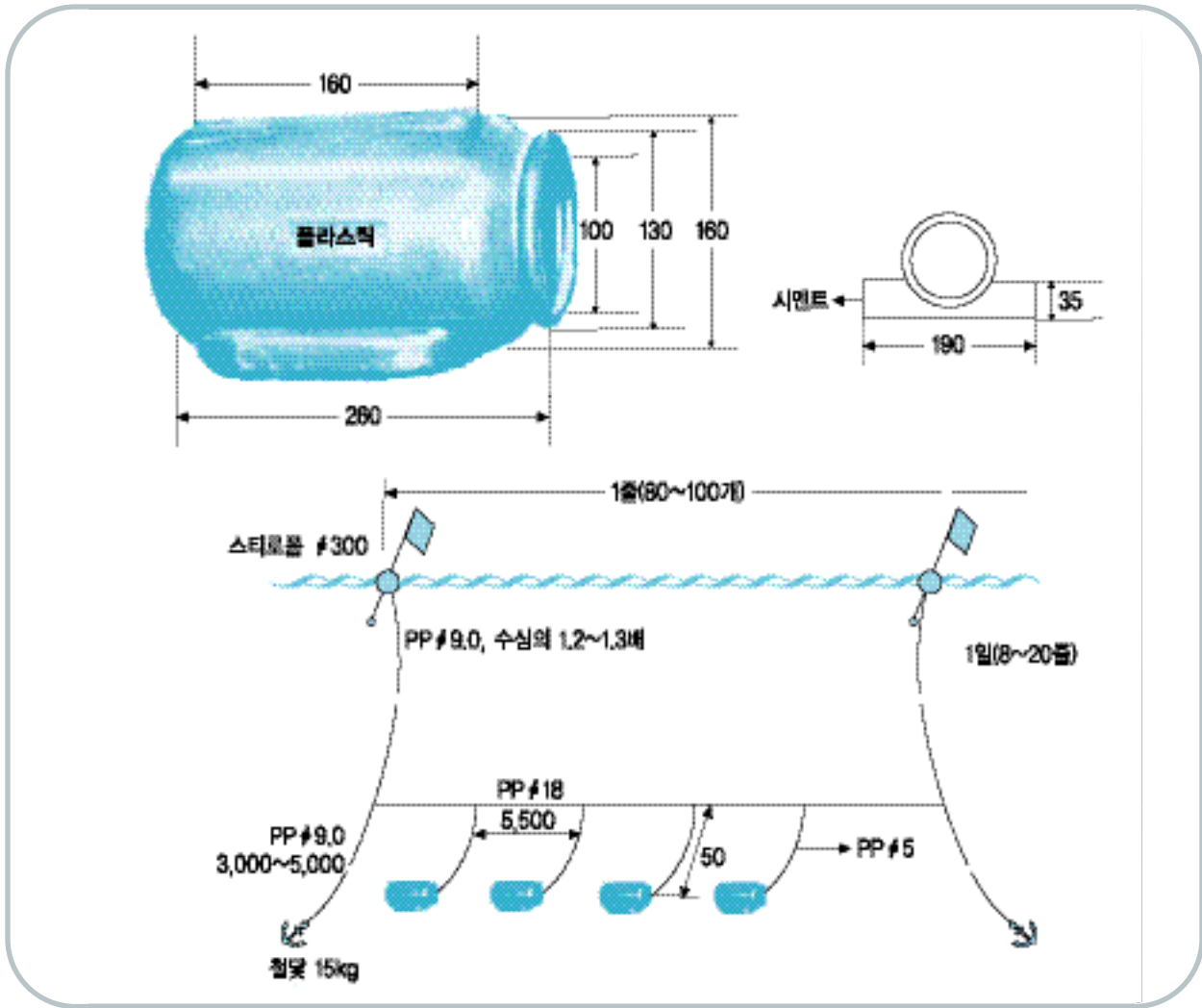
:

: 10~30m. ,

: ,

() NY Td210 2~3 55~60mm , () NY
 Td210 6 303~370mm . 1 60~90
 30 1 1~2 .
 ,
 . ,
 . 1 40~50 , 1
 ~1 30 .

)



: 2~10

: 50m ,

:

:

:

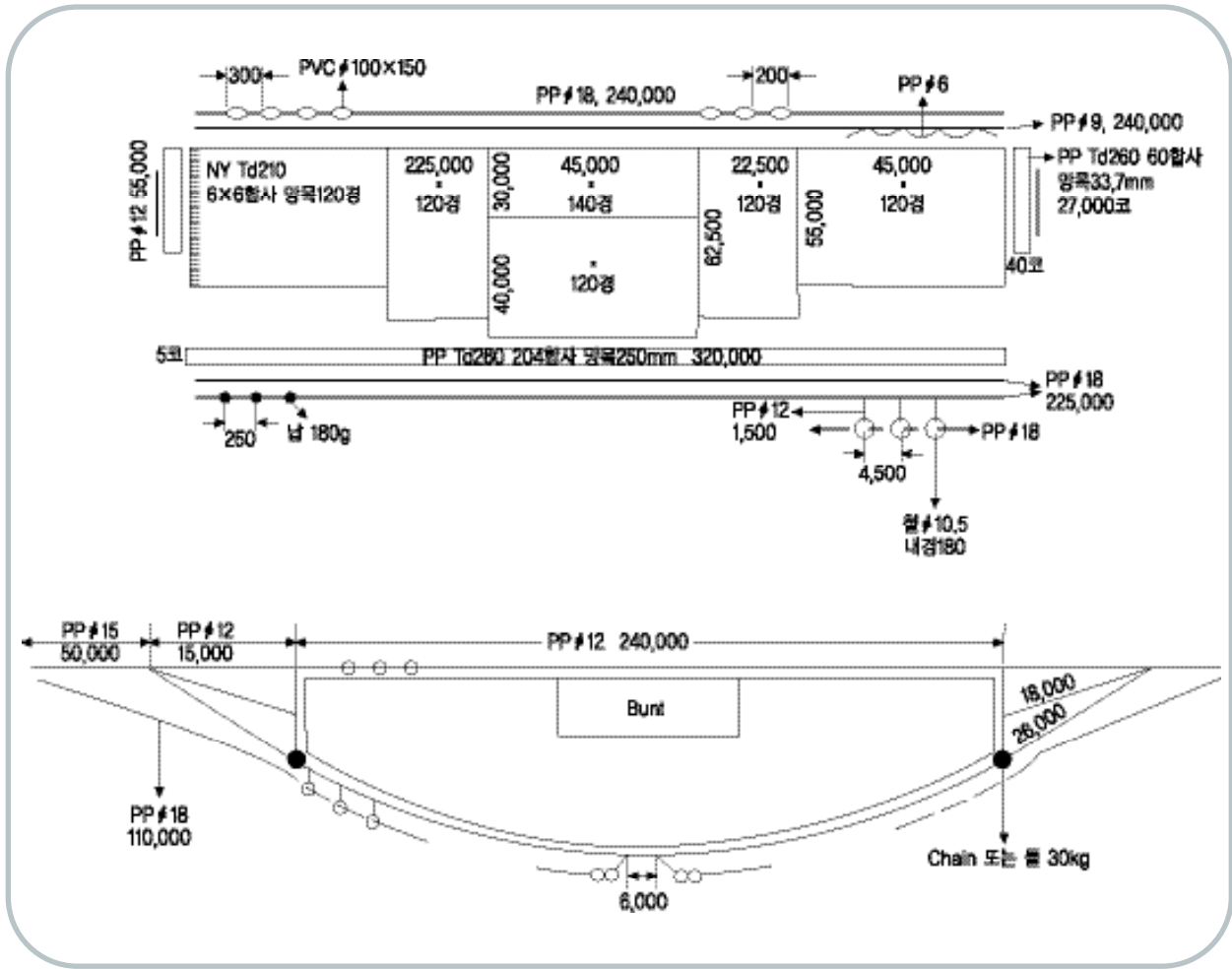
PP 5mm

5.5m PP 18mm

5 6

, 2 1

80~100 1 8 ~20 (700 1,600) .



: 7~11 (,), 12~2 ()

: 20~70m,

: , ,

:

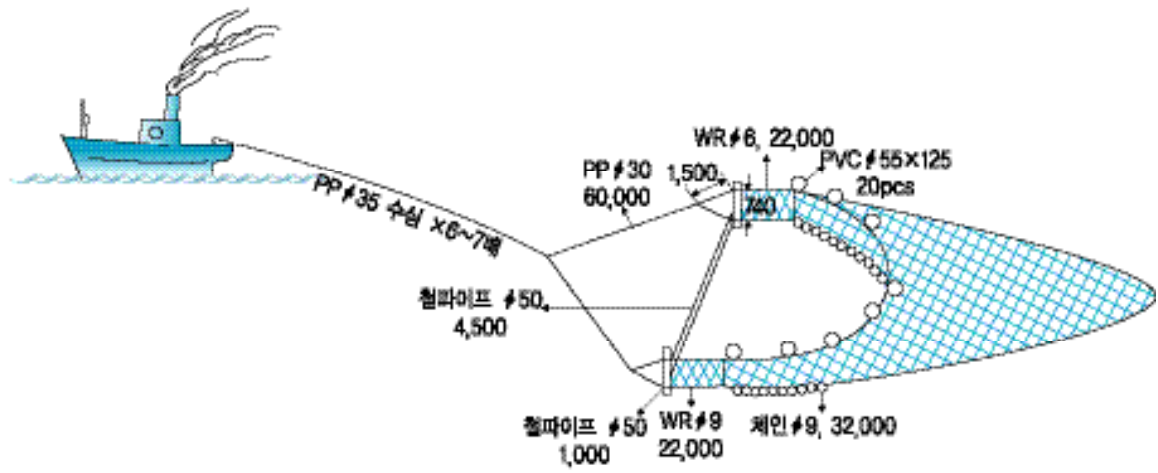
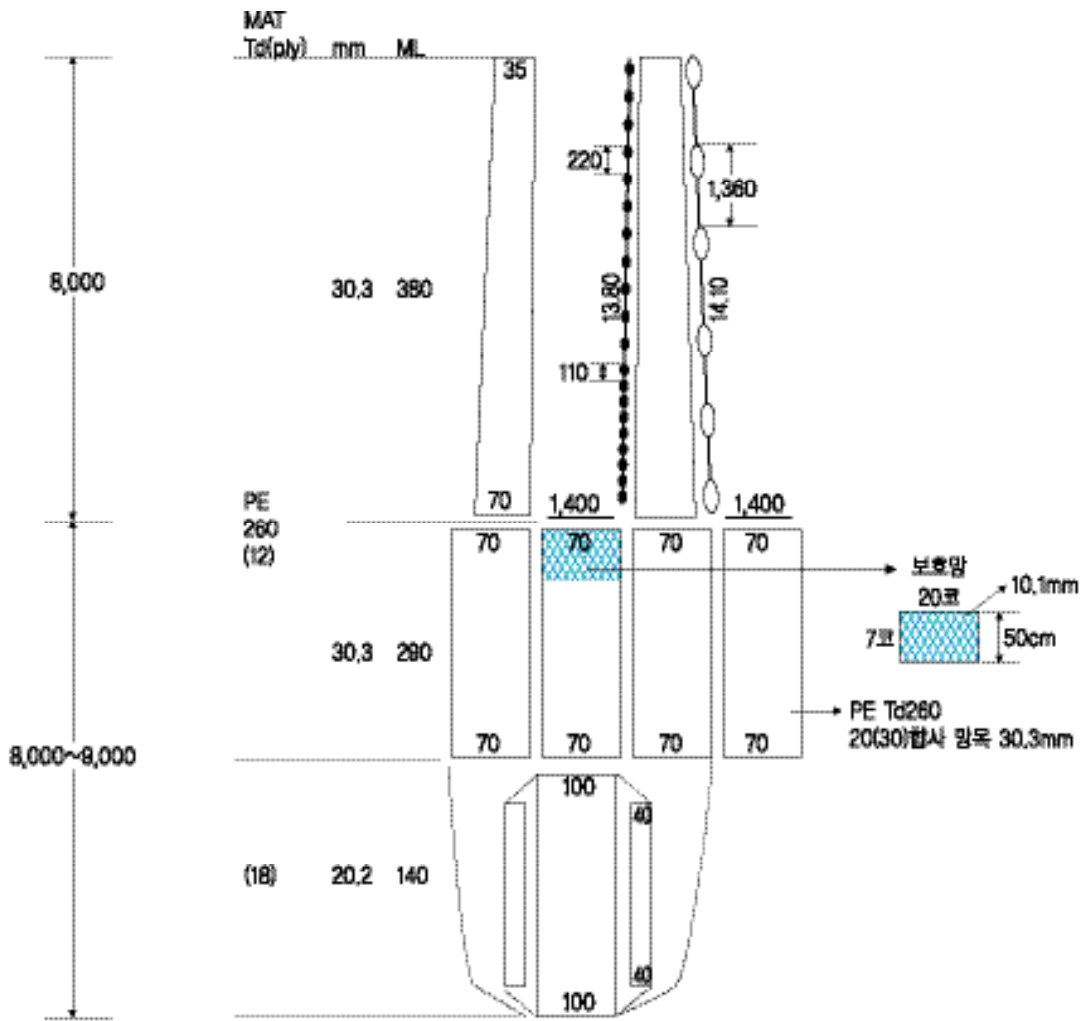
Td210 9 24 120 , 140

. 가

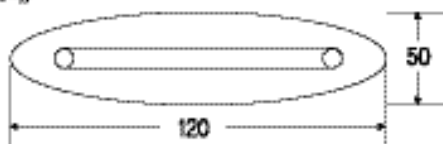
3 1

4 3 ,

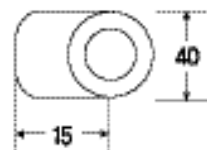
)



품(플라스틱)



납



: 12~4 (, ,), 6~11 (, ,)

: 7~20m, ,

: , , , , , 가

:

PE Td260 12 18

30.3mm

20.2mm

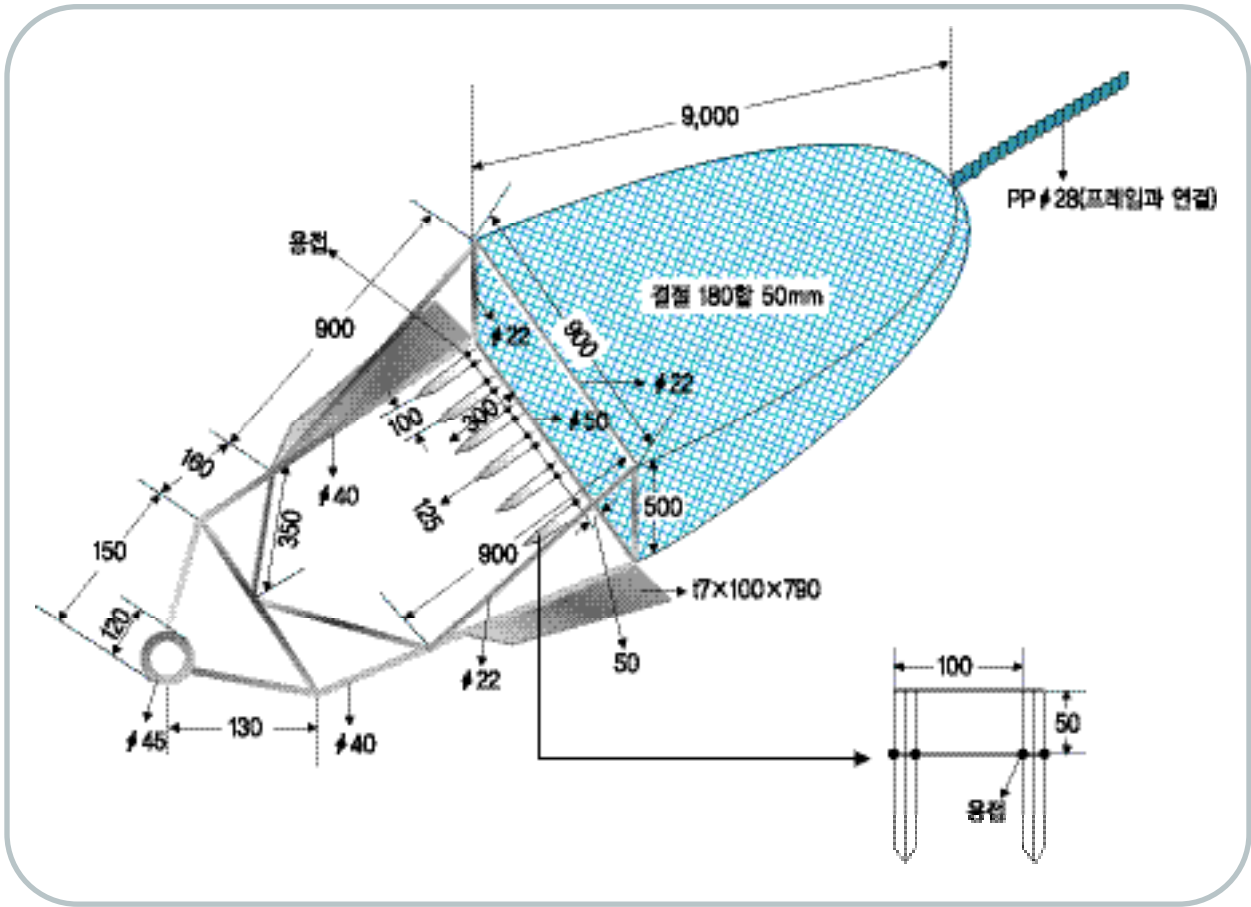
2가

4.5m

7 8

2

1



: 6~7

: 10~30m,

:

:

PE

가

2

가

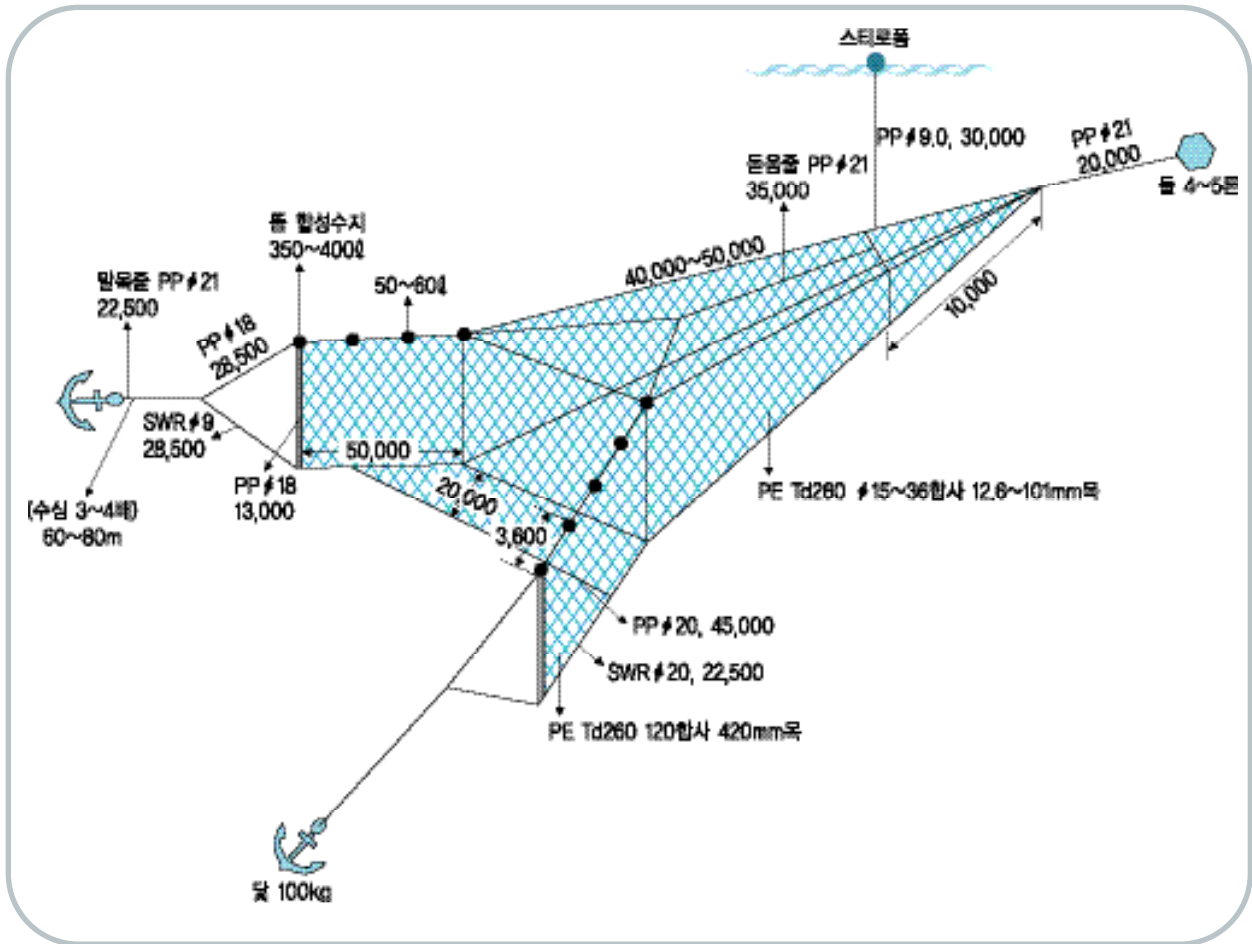
1 , 1

1

가

(Ski)

)



: 3~12

: 20~25m, , .

: ,

:

가

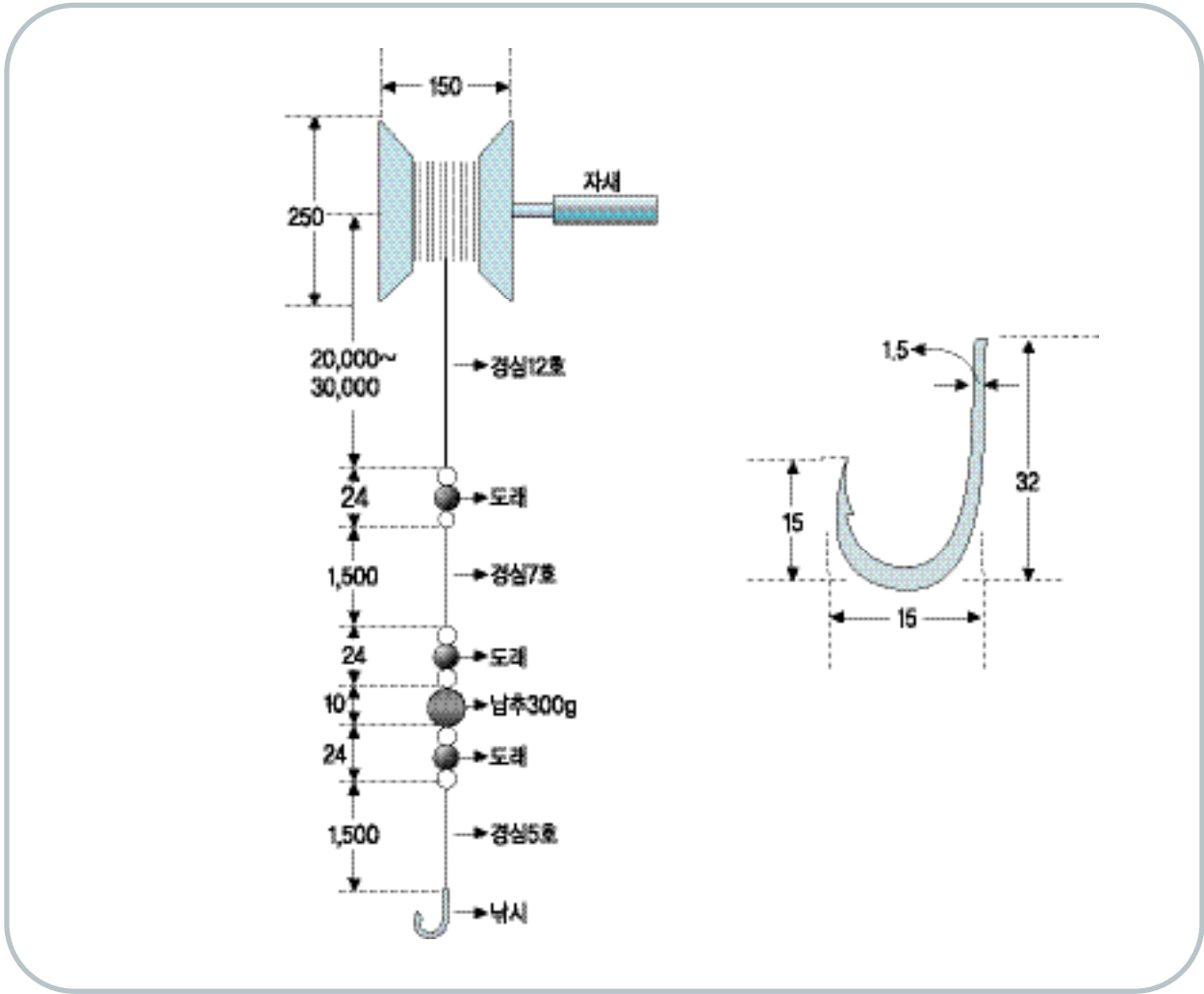
4

, , ,

1

10

)



: 4~11

: 15~20m,

:

:

:

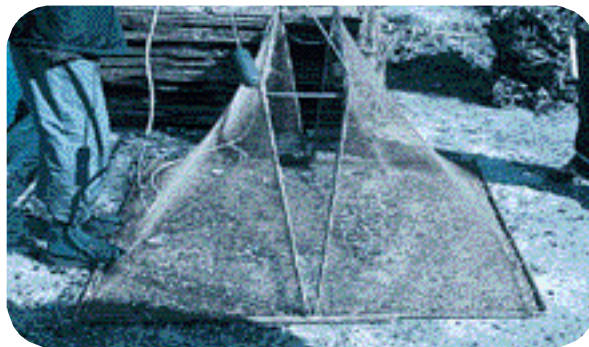
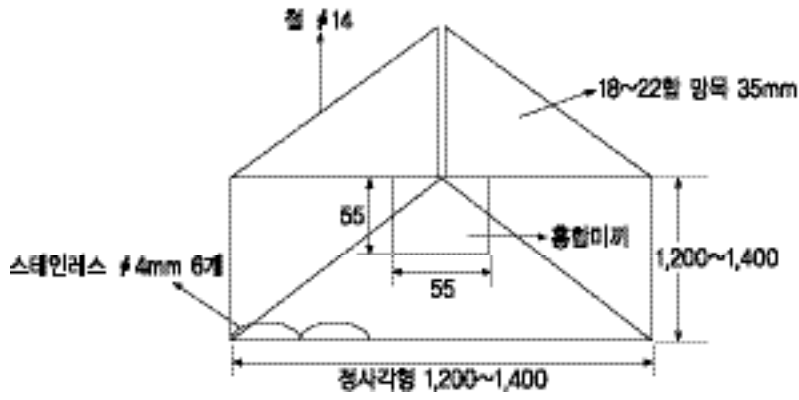
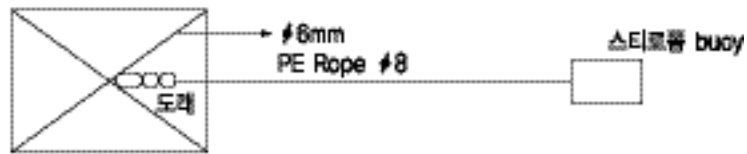
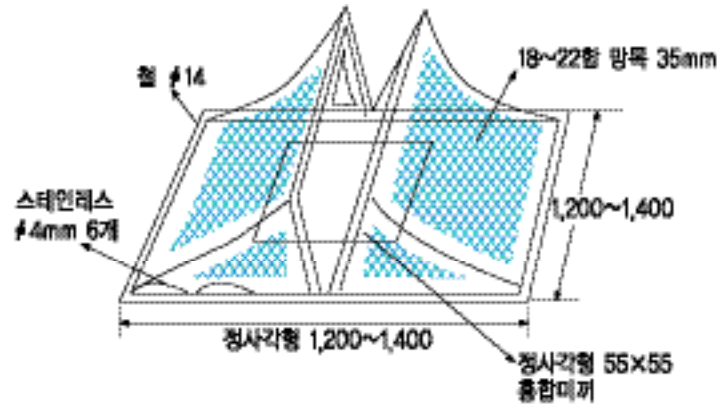
5 12

1

4 5

가
가

)



: 9~10

: 7~20m, ,

:

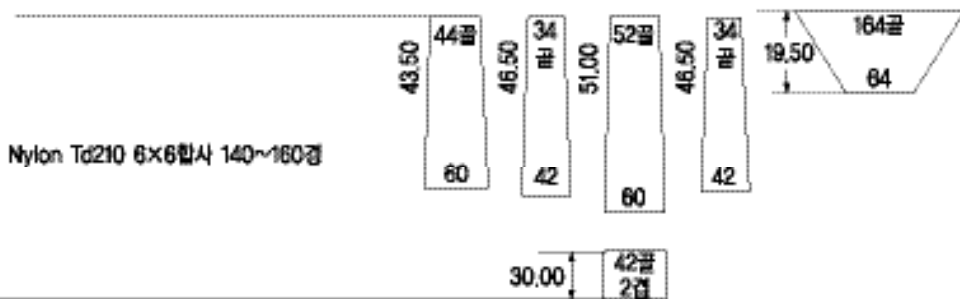
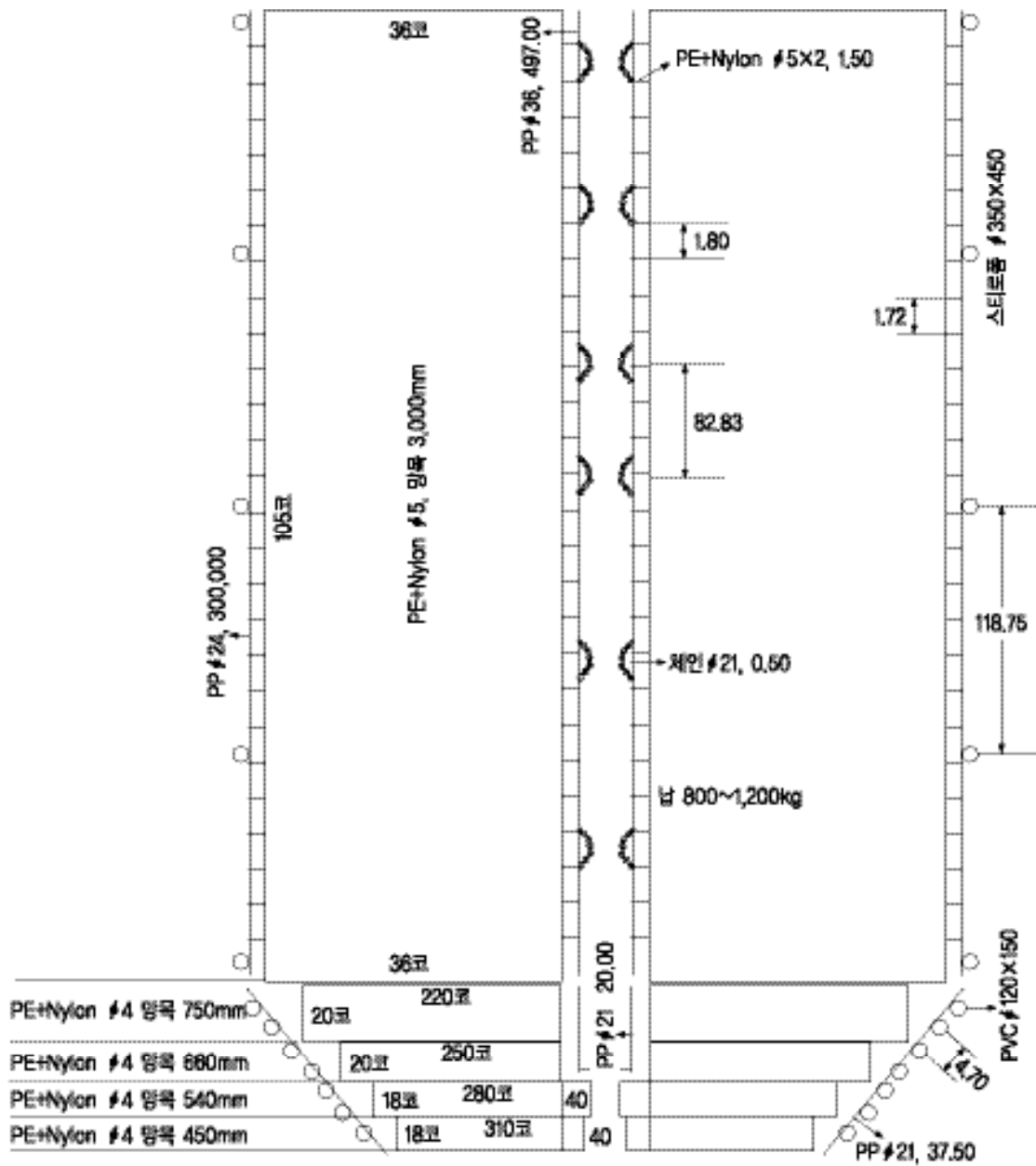
:

:

. 1 20~30

1 5~7 .

)



: 7~2

: 30~50m, , .

:

:

, ,

,

가

가 가

가

. 2

가

가

700m

1가

2k't

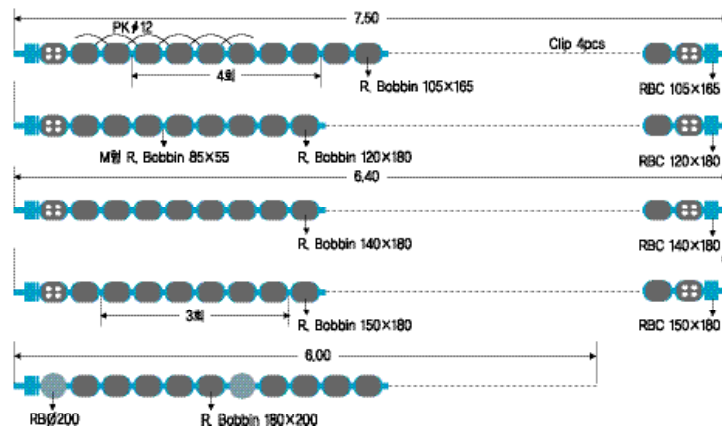
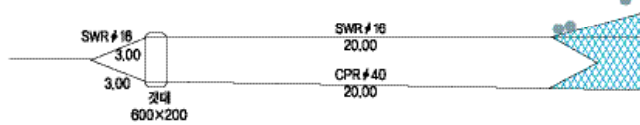
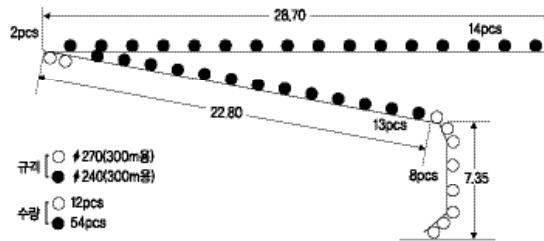
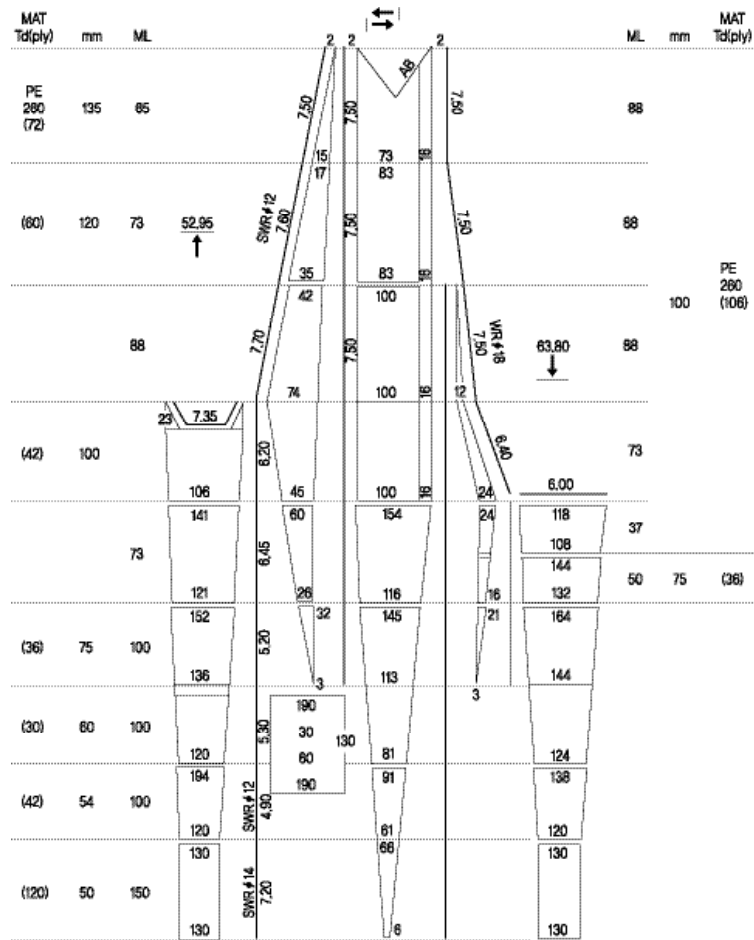
30 40

500

가

가

)



: , 7 8 1 2

: . 50 100m,

: , , ,가 , , ,가 가 80%,
, 가 15%, , 5%

:

, ,

()

. 가 가가 ,

. ()

. 가 ,

. V U

(

, 400 600m) 2 3

2 3kt .

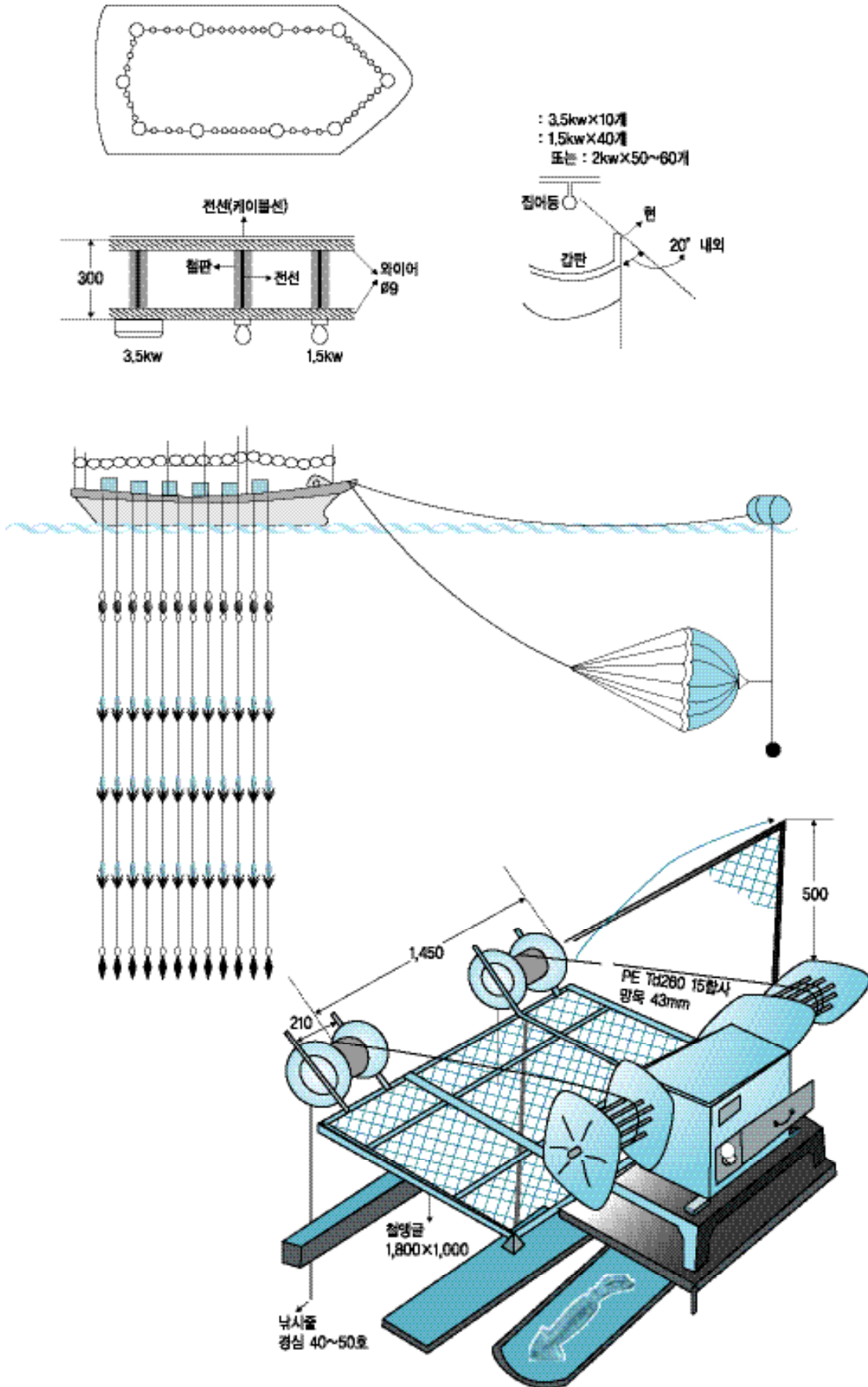
5 10

. , 가 .

. 1 7 8 ,1

20 .

)



: 1~6

: 30~120m,

:

:

:

.

1 2kw

, 20 30

1 2

30 40kw

,

20

가

가

. 가

30

1

,

가

가

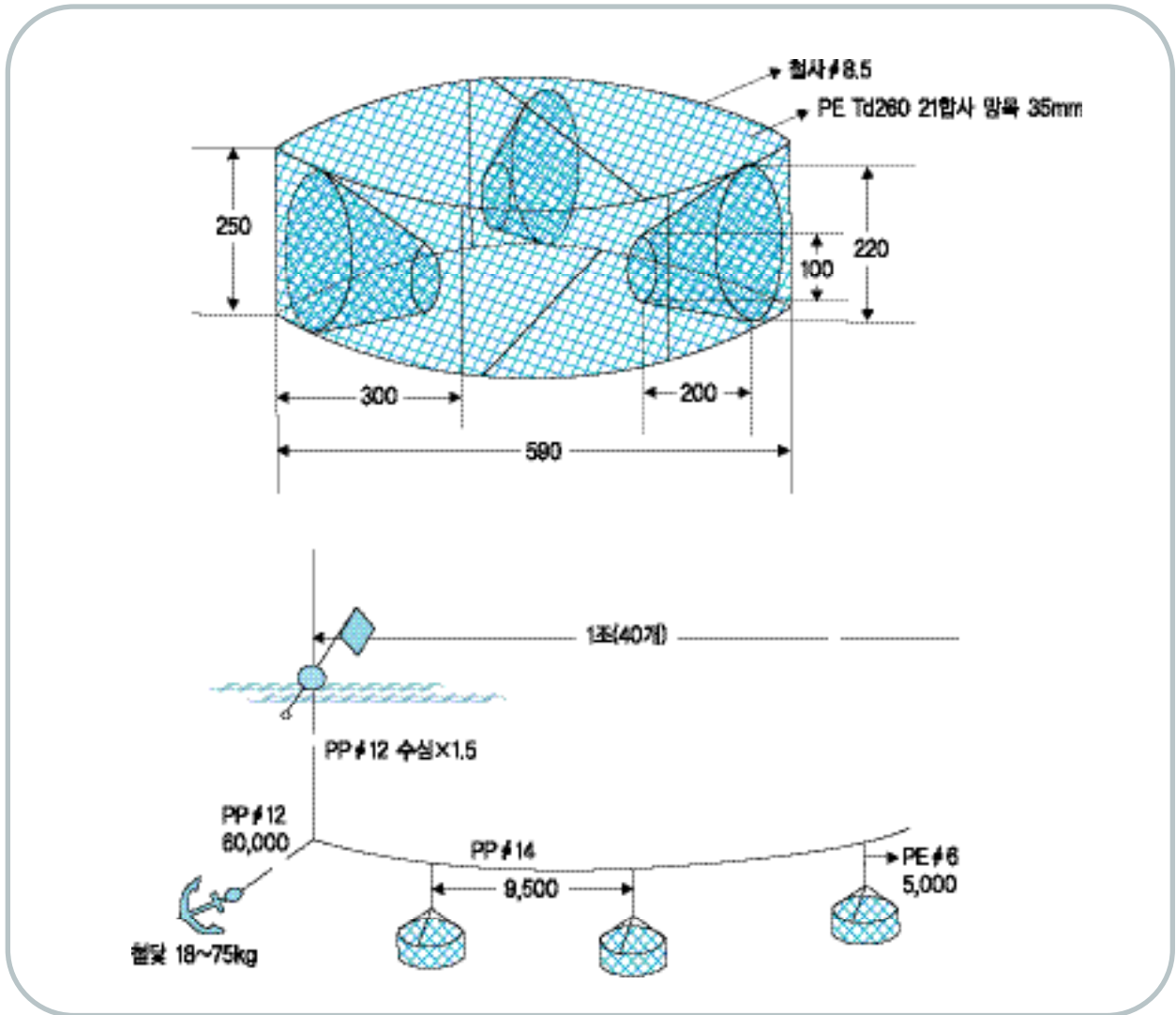
가

22

가

.

) (1)



: , 1~3 : , 4~12 : ()

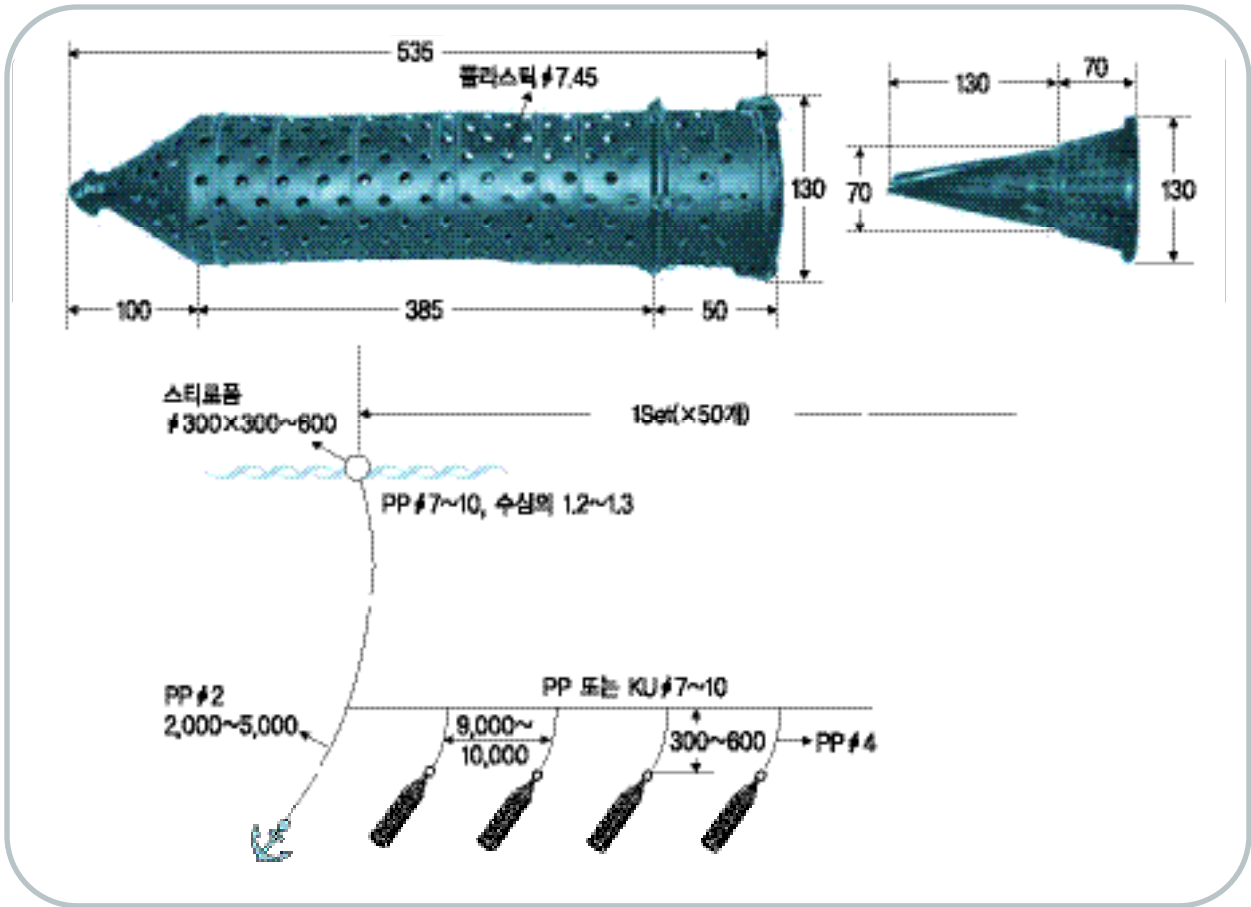
: 20~50m,

: (90%), ,

: , ,

8.5mm	1	40	9~10m	PE Td260 9	35mm
					10~15
			40	1	10~12
1		40~50		2~3	, 1
10~12					

) (2)



:

: 30~120m,

: 95%, 5%

: (13~15cm 2~3),

(1 ,)

. 1 15 가

10,000 .

8~10mm , 50 1

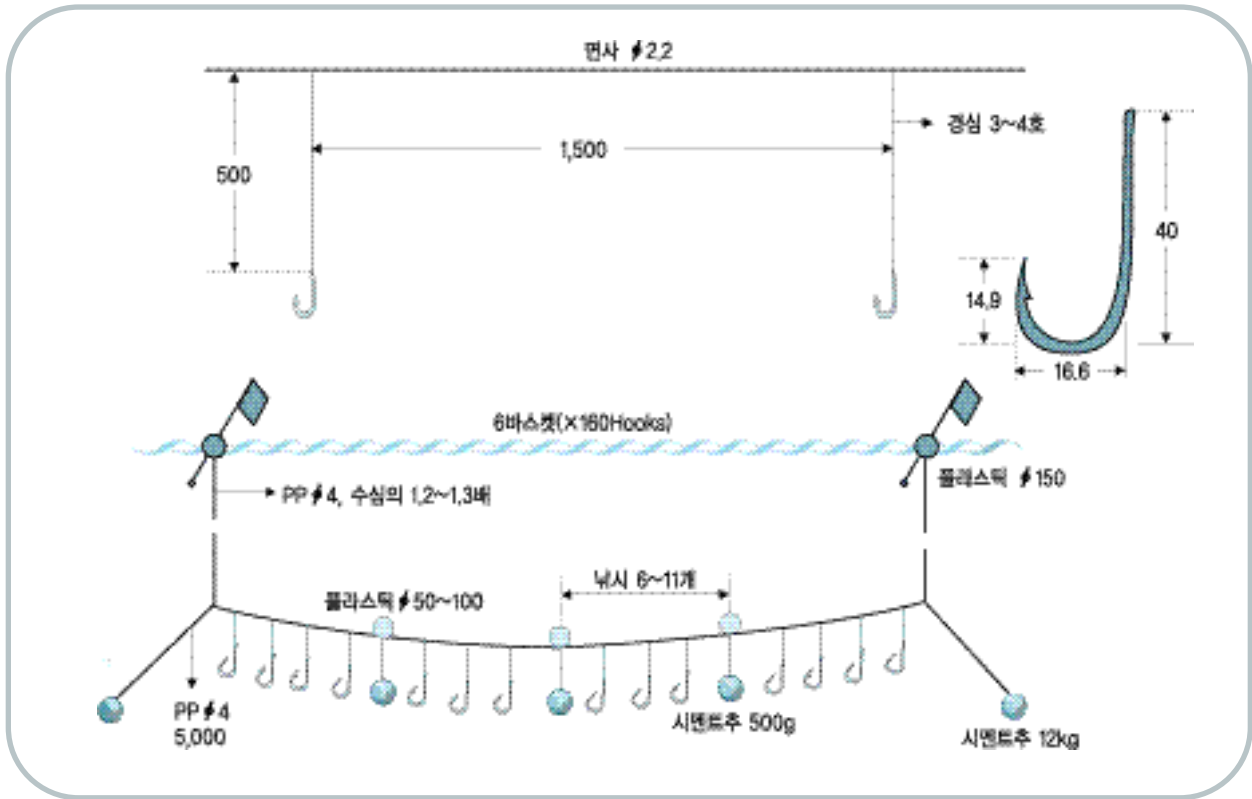
. 10,000 6 ,

6 . 가

(5,000~6,000)

가 1 1 .

)



: (9~2) -

9 -

: 80~200m, ,

: ,

: (), ()

:

22mm

3~4

1.5m

50cm

11

6

50~100mm PVC

500g

1

가 160

, 6

1

, 12kg

9

0.5~1

1

[4.



가.

1)

가)

4-1 , ,
4-1 , ,
27.33 .
가 (135.00)
(74.67) , (54.57) , (30.15) , 가 가
(3.71) . 가
135.00 , 가 4.95 .
가 가 (27.47) , 가 가
(0.00) .
7.82 ,
(12.00) , (10.50) (10.25) ,
가 (3.00) . 가 가
(1.41) , 가 가 (7.15) .
가 27.00 , 가
1.00 .
3.41 9.26 . 가
8.55 , 가 1.00 . 가
30.00 , 가 2.00 .

4-1.

(: ,)

		()										
		135.00	29.00	79.00	135.00	16.00	62.00	41.00	4.95	79.00	15.00	8.55
		2.97	24.00	59.00	135.00	11.00	12.00	8.55	2.97	12.00	10.00	1.00
		27.33	27.21	74.67	135.00	12.75	30.15	17.72	3.71	54.57	12.50	3.41
		28.21	1.91	7.71	0.00	2.36	15.24	11.87	0.47	27.47	3.54	1.81
		27.00	27.00	6.00	13.00	15.00	17.00	10.00	16.00	9.00	4.00	30.00
		1.00	3.00	2.00	8.00	2.00	2.00	1.00	2.00	3.70	2.00	2.00
		7.82	12.00	4.20	10.50	6.25	10.25	6.80	6.17	6.39	3.00	9.26
		5.27	7.15	1.48	3.54	5.97	4.96	3.42	4.80	1.88	1.41	5.73

)

-

4 - 2

105,303.14

(239,714.29) (202,620.00) ,

가 (9,000.00) .

가가 (309,997.71) ,

가가 (1,414.21) .

712,934.10

(1,878,706.33) ,

(1,349,570.00) (1,111,340.00) ,

가 (154,700.00) . 가가

(1,496,138.95) , 가가

(0.00) .

83% .

25,088.89 43,362.77

가 250,000.00 .

186,551.08 332,739.00 ,

가 2,037,389.00 .

4-2.

(:)

		1,000,000.00	0.96	3,403,000.00	1.00
		0.00	0.00	14,368.00	0.04
		105,303.14	0.17	712,934.10	0.83
		189,17.59	0.20	851,515.75	0.20
		1,000,000.00	0.38	3,403,000.00	1.00
		0.00	0.00	346,400.00	0.62
		202,620.00	0.09	1,878,706.33	0.91
		309,997.71	0.11	1,018,14.52	0.11
		50,000.00	0.11	1,514,720.00	1.00
		0.00	0.00	400,000.00	0.89
		12,500.00	0.03	1,111,340.00	0.97
		25,000.00	0.06	490,356.27	0.06
()		10,000.00	0.03	2,407,500.00	1.00
		8,000.00	0.00	291,640.00	0.97
		9,000.00	0.02	1,349,570.00	0.98
		1,414.21	0.02	1,496,138.95	0.02
		400,000.00	0.60	497,000.00	1.00
		0.00	0.00	40,000.00	0.40
		84,166.67	0.14	274,083.33	0.86
		156,538.07	0.23	197,096.53	0.23
		204,000.00	0.52	420,000.00	1.00
		0.00	0.00	42,320.00	0.48
		56,886.62	0.23	165,955.38	0.77
		66,628.41	0.19	100,531.81	0.19
		60,000.00	0.15	1,264,600.00	0.98
		20,000.00	0.02	152,000.00	0.85
		35,000.00	0.09	497,900.00	0.91
		16,431.68	0.05	391,490.13	0.05
		500,000.00	0.96	775,000.00	1.00
		0.00	0.00	14,368.00	0.04
		74,555.56	0.27	241,611.56	0.73
		125,492.08	0.28	276,758.52	0.28

(:)

		600,000.00	0.44	872,000.00	0.96
		20,000.00	0.04	470,000.00	0.56
		239,714.29	0.22	673,304.57	0.78
		236,74.51	0.19	157,960.43	0.19
		0.00	0.00	154,700.00	1.00
		0.00	0.00	154,700.00	1.00
		0.00	0.00	154,700.00	1.00
		250,000.00	0.50	2,037,389.00	1.00
		0.00	0.00	23,000.00	0.50
		25,088.89	0.13	186,551.08	0.87
		43,362.7	0.15	332,739.00	0.15

4-3

137,408.33

(397,866.67)

(361,500.00)

(511,238.20) , 가가 (31,624.40)

124,229.17 ,

가 (285,533.33),

(195,000.00) . 가가 (304,486.66

) , 가 (0.00) .

21,944.44 40,005.67

가가 150,000.00 .

68,969.44 110,307.28 ,

가 500,000.00 .

4-3.

(:)

		1,226,000.00	1.00	800,000.00	1.00
		0.00	0.00	0.00	0.00
		137,408.33	0.50	124,229.17	0.50
		267,731.21	0.43	194,341.56	0.43
		1,226,000.00	1.00	800,000.00	1.00
		0.00	0.00	0.00	0.00
		397,866.67	0.56	285,533.33	0.44
		456,916.66	0.44	304,466.66	0.44
		300,000.00	1.00	600,000.00	0.67
		0.00	0.33	0.00	0.00
		125,000.00	0.60	195,000.00	0.40
		132,287.57	0.36	283,019.43	0.36
		723,000.00	0.83	143,000.00	1.00
		0.00	0.00	50,000.00	0.17
()		361,500.00	0.42	96,500.00	0.58
		511,238.20	0.59	65,760.93	0.59
		80,000.00	0.67	300,000.00	1.00
		0.00	0.00	0.00	0.33
		16,666.67	0.22	102,500.00	0.78
		32,041.64	0.31	121,315.70	0.31
		100,000.00	1.00	90,000.00	1.00
		0.00	0.00	0.00	0.00
		32,461.54	0.53	31,384.62	0.47
		31,624.40	0.40	32,684.19	0.40
		438,400.00	1.00	450,000.00	1.00
		0.00	0.00	0.00	0.00
		115,066.67	0.60	80,666.67	0.40
		170,796.10	0.55	181,466.04	0.55
		190,000.00	1.00	150,000.00	1.00
		0.00	0.00	0.00	0.00
		45,555.56	0.63	26,833.33	0.37
		49,255.90	0.46	44,330.64	0.46
		340,000.00	0.54	348,000.00	1.00
		0.00	0.00	100,000.00	0.46
		95,714.29	0.19	239,071.43	0.81
		137,338.65	0.24	85,145.18	0.24
		0.00	0.00	25,000.00	1.00
		0.00	0.00	25,000.00	1.00
		0.00	0.00	25,000.00	1.00
		150,000.00	1.00	500,000.00	1.00
		0.00	0.00	0.00	0.00
		21,944.44	0.39	68,969.4	0.61
		40,005.67	0.43	110,307.28	0.43

)

4-4 , , 629,587.75

, .

(2,151,774.22), (1,505,454.53) (687,732.80)

(686,435.29) , 가 (150,000.00

) . 가가 (599,656.67

) , 가 (70,710.68) .

560,242.20 ,

(1,940,175.38),

(1,407,430.58), (753,939.20) (624,591.29)

. 가가 (532,409.99)

, 가 (9,953.94) .

69,345.55 ,

(211,598.84), (129,727.43),

(98,023.95) (92,357.40) ,

(-66,206.40) . 가 가

(324,117.65) , 가 가

(17,103.45) .

111,710.46 90,884.06

, 가 365,119.54 .

107,896.44 71,347.67 , 가

366,670.00 .

3,814.02 89,662.00 , 가

240,255.40 .

4-4.

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		2,517,796.29	2,170,41.00	457,350.00
		16,044.25	13,828.00	(756,725.90)
		629,587.75	560,242.20	69,345.55
		635,438.93	599,83.94	167,189.11
		2,369,789.00	2,009,586.00	457,350.00
		411,854.30	373,800.00	(756,725.90)
		1,505,454.53	1,407,430.58	98,023.95
		599,656.67	532,409.99	324,117.65
		980,000.00	1,133,80.00	54,800.00
		342,664.00	300,18.00	(157,317.50)
		687,732.80	753,939.20	(66,206.40)
		283,122.14	309,950.40	106,072.75
()		2,517,796.29	2,170,41.00	347,355.29
		1,785,752.15	1,709,909.76	75,842.39
		2,151,74.22	1,940,175.38	211,598.8
		517,633.38	325,64.77	191,988.61
		1,090,900.00	884,008.00	206,892.00
		22,000.00	25,020.00	(78,152.00)
		327,008.49	283,294.67	43,713.82
		405,375.27	317,397.62	101,310.52
		685,223.00	482,442.00	420,661.50
		34,503.00	96,100.00	(70,08.52)
		363,17.24	270,819.8	92,357.40
		194,241.09	136,940.45	125,200.08
		600,000.00	382,670.00	252,696.00
		143,762.00	109,484.40	(62,670.00)
		363,806.17	234,078.73	129,727.43
		155,501.4	118,404.16	121,505.36
		366,393.00	305,07.00	70,845.00
		16,044.25	13,828.00	2,216.25
		177,669.97	131,849.38	45,820.59
		82,398.02	70,924.7	17,103.45
		1,015,750.00	963,100.00	137,547.00
		275,237.00	145,663.00	(37,940.00)
		686,435.29	624,591.29	61,844.00
		291,655.88	301,203.10	70,045.54
		200,000.00	98,47.00	115,600.00
		100,000.00	84,400.00	1,523.00
		150,000.00	91,438.50	58,561.50
		70,710.68	9,953.94	80,664.62
		365,119.54	366,670.00	240,255.40
		12,000.00	16,211.00	(300,28.50)
		111,710.8	107,896.4	3,814.02
		90,88.06	71,347.67	89,662.00

4-5					
	가				
	257,795.82				
	(1,102,710.55)			(607,541.07)	
(540,534.00)		(347,684.71)			
가가		(345,860.23)		가가	
(9,963.13)					
		227,173.09			
		(595,890.00)		(514,637.24	
)		가가		(299,734.33	
) ,가		(12,020.82)			
				23,297.58	
2,874.33	11,669.22				
		가	34,291.59		가
		(100,737.05)			(59,997.00
)	(48,844.00)	가		가가	
(69,346.59)		,가		(0.00)	
			40,790.21	30,163.44	
			116,500.00	4,809.00	
	41,117.88	29,202.93			95,240.00
1,440.00		가			18,345.68
46,678.16			273,096.00	460.00	

4-5.

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												가	
		1,209,350.00	0.97	1,062,000.00	0.81	180,925.00	0.16	30,000.00	0.04	87,835.75	0.08	237,700.00	0.24
		3,100.00	0.13	9,625.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	320.00	0.00
		257,795.82	0.40	227,173.09	0.46	23,297.58	0.05	2,877.33	0.01	11,669.22	0.02	34,291.59	0.06
		304,465.28	0.17	249,093.78	0.15	34,488.94	0.03	5,333.55	0.01	17,307.37	0.02	48,594.89	0.05
		949,120.00	0.77	1,062,000.00	0.54	119,819.00	0.06	30,000.00	0.03	45,000.00	0.08	237,700.00	0.16
		191,056.00	0.34	24,000.00	0.06	0.00	0.00	0.00	0.00	4,000.00	0.01	17,320.00	0.03
		607,541.07	0.46	595,890.00	0.40	65,125.27	0.04	7,792.00	0.01	26,389.53	0.02	100,737.05	0.07
		203,461.11	0.11	299,734.33	0.12	38,494.54	0.02	9,818.88	0.01	14,465.46	0.02	69,346.59	0.04
		906,200.00	0.97	234,000.00	0.36	15,914.00	0.05	3,000.00	0.01	30,000.00	0.04	65,817.50	0.09
		135,700.00	0.45	25,000.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	20,000.00	0.00
		540,534.00	0.66	164,056.00	0.25	3,182.80	0.01	1,660.00	0.00	12,200.00	0.02	48,844.00	0.05
		345,860.23	0.22	93,815.43	0.14	7,116.96	0.02	1,525.78	0.00	15,401.30	0.02	25,109.61	0.05
	()	1,209,350.00	0.58	637,571.00	0.29	180,925.00	0.08	10,123.05	0.01	87,835.75	0.05	60,042.00	0.04
		996,071.10	0.56	391,703.8	0.23	71,430.09	0.04	0.00	0.00	74,853.00	0.03	59,952.00	0.03
		1,102,710.55	0.57	514,637.24	0.26	126,177.54	0.06	5,061.53	0.00	81,344.37	0.04	59,997.00	0.03
		150,810.96	0.02	173,854.59	0.05	77,424.60	0.03	7,158.08	0.00	9,180.19	0.01	63.64	0.01
		443,833.00	0.67	400,992.00	0.45	25,452.00	0.08	1,440.00	0.02	500.00	0.02	67,350.00	0.24
		11,600.00	0.27	10,500.00	0.26	805.00	0.00	0.00	0.00	0.00	0.00	320.00	0.01
		132,470.33	0.43	113,838.00	0.38	11,108.67	0.05	390.00	0.01	233.33	0.01	25,254.33	0.13
		163,659.91	0.14	146,878.06	0.07	11,223.55	0.03	560.54	0.01	258.20	0.01	25,359.49	0.11
		129,150.00	0.62	334,209.00	0.70	19,792.00	0.06	6,000.00	0.04	18,000.00	0.06	26,000.00	0.16
		39,307.00	0.25	25,000.00	0.26	0.00	0.00	100.00	0.00	0.00	0.00	4,750.00	0.01
		81,981.38	0.34	157,469.15	0.52	10,539.23	0.04	2,426.08	0.01	3,117.31	0.01	11,025.15	0.06
		28,459.38	0.10	110,746.15	0.15	5,718.42	0.02	1,477.73	0.01	5,119.18	0.02	6,169.38	0.05
		193,000.00	0.50	190,000.00	0.67	36,000.00	0.16	1,000.00	0.01	22,000.00	0.06	63,230.00	0.17
		28,000.00	0.13	54,000.00	0.39	5,375.00	0.02	50.00	0.00	1,200.00	0.01	1,530.00	0.01
		74,208.40	0.32	112,589.83	0.49	16,541.83	0.08	297.50	0.00	8,416.67	0.03	20,691.17	0.08
		60,476.09	0.15	55,408.37	0.10	13,335.26	0.05	375.10	0.00	7,808.82	0.02	22,578.93	0.06
		83,700.00	0.49	150,000.00	0.81	15,432.00	0.11	8,000.00	0.03	23,000.00	0.08	35,300.00	0.16
		3,100.00	0.14	9,625.00	0.41	287.00	0.02	0.00	0.00	0.00	0.00	332.00	0.01
		36,347.09	0.27	74,678.82	0.59	8,228.98	0.06	1,451.80	0.01	3,359.60	0.02	6,951.60	0.04
		21,462.94	0.10	36,609.83	0.11	4,694.47	0.03	2,154.8	0.01	6,597.18	0.03	9,521.85	0.03
		1533,110.00	0.59	330,792.00	0.55	12,000.00	0.21	4,490.00	0.02	3,000.00	0.04	273,096.00	0.7
		41,453.00	0.28	79,680.00	0.31	3,300.00	0.00	0.00	0.00	0.00	0.00	460.00	0.01
		347,647.71	0.52	215,858.29	0.37	7,832.14	0.06	463.09	0.00	587.35	0.01	18,345.68	0.17
		190,411.22	0.11	91,187.67	0.08	3,112.83	0.05	880.67	0.01	906.93	0.01	46,678.16	0.20

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												가	
		59,400.00	0.70	42,000.00	0.43	3,150.00	0.03	9,000.00	0.01	31,200.00	0.05	30,000.00	0.11
		45,310.00	0.46	25,000.00	0.30	0.00	0.01	0.00	0.00	2,640.00	0.00	16,500.00	0.02
		52,355.00	0.58	33,500.00	0.36	1,575.00	0.01	2,633.71	0.00	15,348.57	0.03	22,848.14	0.05
		9,963.13	0.17	12,020.82	0.09	2,227.39	0.01	3,877.99	0.00	9,617.34	0.02	4,179.05	0.03
		116,500.00	0.73	95,240.00	0.71	30,823.00	0.03	10.00	0.00	272.00	0.00	7,735.00	0.08
		4,809.00	0.06	1,440.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	7,735.00	0.00
		40,790.21	0.39	41,117.88	0.37	6,462.53	0.02	5.00	0.00	136.00	0.00	7,735.00	0.04
		30,163.4	0.17	29,202.93	0.17	6,663.22	0.02	7.07	0.00	192.33	0.00	0.00	0.06

4 - 6

12% , 10% (33%),
(30%), (26%), (12%) .
(-10%), (-9%) .
가 가 (66%) , 가
(7%) .

123% ,
(493%), (195%) .
가 가 (539%) , 가
(0%) .

40% ,
(52%), (44%) .
가 가 (75%) , 가 (0%) .

-57% 253% .
63%, 69% , 65%

83% . 1.07 1.10
4.26 .

4-6.

				()	
		0.61	10.50	15.85	2.87
		(2.03)	0.00	0.00	0.00
		0.12	1.23	1.89	0.40
		0.36	2.31	2.50	0.46
		0.53	4.50	1.98	0.88
		(0.82)	0.00	0.43	0.04
		0.04	0.69	0.97	0.34
		0.29	1.37	0.46	0.24
		0.12	1.00	0.86	0.59
		(0.29)	0.00	0.00	0.00
		(0.09)	0.33	0.44	0.24
		0.18	0.58	0.35	0.26
		0.14	0.01	8.63	0.36
()		0.04	0.01	0.7	0.17
		0.09	0.01	4.69	0.26
		0.07		5.58	0.14
		0.25	0.81	4.04	0.99
		(0.59)	0.00	0.44	0.00
		(0.10)	0.41	1.15	0.37
		0.37	0.57	1.43	0.38
		0.61	5.52	15.85	1.72
		(2.03)	0.01	0.13	0.00
		0.07	1.95	3.47	0.39
		0.66	2.25	3.95	0.42
		0.57	0.60	1.83	1.25
		(0.20)	0.11	0.42	0.00
		0.33	0.28	0.94	0.44
		0.28	0.28	0.54	0.49
		0.39	1.06	10.02	2.87
		0.14	0.11	0.07	0.00
		0.26	0.49	2.48	0.52
		0.07	0.29	2.63	0.75
		0.47	10.50	1.69	0.70
		(0.04)	0.29	0.51	0.20
		0.12	4.93	1.05	0.36
		0.17	5.39	0.48	0.18
		0.58	0.00	0.65	0.16
		0.02	0.00	0.65	0.16
		0.30		0.65	0.16
		0.40			
		0.69	2.66	4.26	4.60
		(13.90)	0.00	0.03	0.00
		(0.57)	0.63	1.07	0.65
		2.53	0.69	1.10	0.83

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4 - 8 .
 14,969.79 .
 (33,977.78), (20,000.00) ,
 가 (6,666.67) .
 가가 (220,000.00) ,
 가가 (10,000.00) .
 135,825.51 .
 (384,000.00),
 (305,625.00) , 가 (35,318.76)
 . 가가 (1,819,320.00)
 , 가 (76,310,00) .
 80% , (94%),
 (87%) .

4-8. (:)

		220,000.00	1.00	1,824,800.00	1.00
		0.00	0.00	5,480.00	0.00
		14,969.79	0.20	135,825.51	0.80
		28,006.53	0.21	331,697.37	0.21
		10,000.00	0.40	100,000.00	1.00
		0.00	0.00	15,000.00	0.60
		6,666.67	0.16	46,666.67	0.84
		5,773.50	0.21	46,457.87	0.21
		35,000.00	1.00	83,310.00	1.00
		0.00	0.00	7,000.00	0.00
		8,902.94	0.21	35,318.76	0.79
		9,895.53	0.24	21,963.54	0.24
		30,000.00	0.08	558,500.00	0.97
		15,000.00	0.03	171,500.00	0.92
		20,000.00	0.06	384,000.00	0.94
		8,660.25	0.03	196,278.50	0.03

4-9

10,435.15

(25,000.00),

(18,333.33), (14,444.44)

가 가 (100,000.00) , 가 가

(15,000.00) 21,341.75 ,

가 (56,222.22)

(26,666.67) 가 가

(140,000.00) , 가 (40,000.00)

11,600.00 2,100.00

가 가 43,000.00 , 가 0

가 가 10,000.00 , 가

0

21,416.67 37,666.67

가 가 100,000.00 , 가 0

가 가 120,000.00 , 가

0

4-9.

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		100,000.00	1.00	140,000.00	1.00
		0.00	0.00	0.00	0.00
		10,435.15	0.34	21,341.75	0.66
		19,788.96	0.43	24,844.10	0.43
		50,000.00	0.50	50,000.00	1.00
		0.00	0.00	10,000.00	0.50
		18,333.33	0.23	26,666.67	0.77
		27,537.85	0.25	20,816.66	0.25
		71,000.00	1.00	65,000.00	1.00
		0.00	0.00	0.00	0.00
		9,385.71	0.26	20,047.14	0.7
		19,060.31	0.41	19,285.24	0.41
		30,000.00	1.00	0.00	0.00
		15,000.00	1.00	0.00	0.00
		25,000.00	1.00	0.00	0.00
		8,660.25	0.00	0.00	0.00

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		25,000.00	1.00	70,000.00	1.00
		0.00	0.00	0.00	0.00
		6,605.50	0.42	16,625.00	0.58
		6,880.02	0.39	18,005.02	0.39
		70,000.00	0.47	140,000.00	1.00
		0.00	0.00	0.00	0.53
		14,444.44	0.12	56,222.22	0.88
		24,551.53	0.18	45,795.14	0.18
		100,000.00	1.00	65,000.00	1.00
		0.00	0.00	0.00	0.00
		10,800.00	0.39	16,666.67	0.61
		25,113.65	0.49	18,922.92	0.49
		43,000.00	1.00	10,000.00	0.50
		0.00	0.50	0.00	0.00
		11,600.00	0.78	2,100.00	0.22
		13,359.97	0.25	3,314.95	0.25
		100,000.00	1.00	120,000.00	1.00
		0.00	0.00	0.00	0.00
		21,416.67	0.52	37,666.67	0.48
		28,990.4	0.47	42,382.10	0.47

4 - 10

14,553.09

가

(27,222.22) ,

(15,147.14) .

가가

(65,000.00)

, 가 가

(0) .

5,819.59 ,

(28,888.89) ,

(8,333.33) .

가 가

(90,000.00) , 가

(0

) .

		65,000.00	1.00	90,000.00	0.80	35,000.00	1.00
		0.00	0.00	0.00	0.00	0.00	0.00
		14,553.09	0.76	5,819.59	0.19	969.07	0.05
		15,344.06	0.29	13,728.43	0.25	4,649.04	0.19
		30,000.00	0.60	20,000.00	0.50	20,000.00	1.00
		0.00	0.00	0.00	0.00	0.00	0.00
		11,000.00	0.30	8,333.33	0.30	7,333.33	0.40
		16,522.71	0.30	10,408.33	0.26	11,015.14	0.53
		65,000.00	1.00	30,000.00	0.80	20,000.00	0.57
		0.00	0.20	0.00	0.00	0.00	0.00
		15,147.14	0.80	4,157.14	0.17	742.86	0.03
		14,680.53	0.29	9,248.82	0.29	3,500.78	0.12
		0.00	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00
		0.00		0.00		0.00	
		0.00		0.00		0.00	
		50,000.00	1.00	20,000.00	0.44	0.00	0.00
		0.00	0.56	0.00	0.00	0.00	0.00
		13,675.00	0.89	2,950.00	0.11	0.00	0.00
		13,191.18	0.16	6,320.18	0.16	0.00	0.00
		50,000.00	1.00	90,000.00	0.67	1,000.00	0.04
		0.00	0.33	0.00	0.00	0.00	0.00
		27,222.22	0.59	28,888.89	0.40	111.11	0.00
		17,519.83	0.22	30,900.83	0.23	333.33	0.01
		65,000.00	1.00	30,000.00	0.60	35,000.00	1.00
		0.00	0.00	0.00	0.00	0.00	0.00
		12,222.22	0.7	2,777.78	0.17	1,666.67	0.08
		16,022.42	0.30	6,646.77	0.23	6,933.75	0.26
		0.00	0.00	5,000.00	1.00	5,000.00	0.50
		0.00	0.00	0.00	0.50	0.00	0.00
		0.00	0.00	1,600.00	0.88	500.00	0.13
		0.00	0.00	2,170.51	0.25	1,581.14	0.25
		100,000.00	0.83	50,000.00	1.00	0.00	0.00
		0.00	0.00	0.00	0.17	0.00	0.00
		22,363.64	0.41	17,166.67	0.59	0.00	0.00
		34,823.19	0.34	18,634.4	0.34	0.00	0.00

0 1,600.00 .

가 5,000.00 , 가 0 .

22,363.64 17,166.67

가 100,000.00 , 가 0 .

가 50,000.00 , 가 0 .

)

4-11	,	,	
,	.		73,504.32
,			(450,000.00),
(124,402.73),	(94,584.03)	.	
가 가	(524,017.00)	,	가
(15.612.00)	.		
	65,063.91	,	
	(234,366.67),	(141,069.40),	
(84,883.67)	.	가 가	
(727,209.00)	,	가	(18,274.00
)	.		
	6,213.01	,	
(215,633.33),	(11,539.17)	.	
가 가	(447,825.00)	,	가
(16,938.00)	.		
		29,681.00	20,906.25
5,806.65	.		21,698.43
15,946.14	,	13,840.20	.
가	22,670.00	,	가 -26,280.00
		53,113.90	33,838.25
	19,275.65	.	80,871.12
56,289.71	,	31,338.50	.
가	73,402.50	,	가 -12,810.00

4-11.

(:)

		700,000.00	730,040.00	491,825.00
		3,000.00	1,410.00	(205,040.00)
		73,504.32	65,063.91	6,213.01
		136,366.69	149,749.94	65,902.12
		35,212.00	27,834.00	7,378.00
		19,600.00	9,560.00	(9,560.00)
		27,406.00	19,272.33	(1,001.67)
		11,039.35	9,191.18	8,470.41
		43,445.00	53,189.00	28,440.00
		3,000.00	2,256.10	(28,619.50)
		20,973.60	16,618.53	3,817.29
		11,660.96	11,410.93	10,382.15
		700,000.00	256,000.00	491,825.00
		300,000.00	208,175.00	44,000.00
		450,000.00	234,366.67	215,633.33
		217,944.95	24,236.16	241,528.76
		248,390.00	167,172.00	81,218.00
		4,498.90	1,410.00	(1,410.00)
		42,306.60	28,652.10	11,539.17
		59,569.55	39,301.61	20,026.60
		206,692.00	183,706.00	62,739.00
		5,010.50	3,996.00	(24,686.00)
		94,584.03	84,883.67	9,700.37
		86,215.12	83,806.59	29,531.42
		530,000.00	730,040.00	62,896.00
		5,983.00	2,831.00	(205,040.00)
		124,402.73	141,069.40	(16,666.67)
		186,325.28	254,766.4	73,404.4
		57,834.00	52,300.00	22,670.00
		1,700.00	1,847.50	(26,280.00)
		29,681.00	20,906.25	5,806.65
		21,698.43	15,946.14	13,840.20
		280,000.00	207,025.00	73,402.50
		2,400.00	2,273.00	(12,810.00)
		53,113.90	33,838.25	19,275.65
		80,871.12	56,289.71	31,338.50

4-12

	가			
	34,606.03			
	(85,166.67)		(82,675.95)	
	가가		(422,596.00)	가
	(5,550.00)			
	20,168.63			
	(92,166.67)		(44,935.00)	
	가가		(195,000.00)	가
	(7,800.00)			
			1,853.15	128.86
1,801.52				
	가	6,382.90		가
	(19,200.00)		(15,078.38)	가
	가가		(91,115.00)	가
	(2,972.00)			
			14,550.00	3,294.00
가	1,867.75			9,993.72
6,541.73	가		1,167.29	가
가	29,300.00	가	1,150,00	
			17,596.17	10,320.83
가	3,851.75			29,620.89
22,120.47	가		5,042.54	
가가	108,500.00	가	1,200.00	

												가	
		425,000.00	0.97	195,000.00	0.71	41,500.00	0.20	3,000.00	0.03	31,000.00	0.12	91,240.00	0.86
		220.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	125.00	0.01
		34,606.03	0.60	20,168.63	0.21	1,853.15	0.04	128.86	0.00	1,801.52	0.00	6,382.90	0.15
		83,915.98	0.22	45,313.50	0.23	5,325.19	0.04	486.08	0.00	6,737.88	0.02	15,979.26	0.14
		10,750.00	0.54	10,000.00	0.49	1,584.00	0.06	100.00	0.00	200.00	0.01	5,000.00	0.23
		5,200.00	0.36	2,200.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	1,833.00	0.09
		7,783.33	0.43	7,400.00	0.36	892.67	0.04	55.33	0.00	76.67	0.00	2,997.67	0.17
		2,794.79	0.10	4,503.33	0.13	810.97	0.03	50.85	0.00	107.86	0.00	1,711.76	0.07
		41,050.00	0.97	20,000.00	0.60	919.00	0.10	300.00	0.03	0.00	0.00	5,913.00	0.67
		680.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	232.00	0.03
		9,981.39	0.65	4,139.7	0.16	254.17	0.02	10.95	0.00	0.00	0.00	2,029.68	0.16
		7,081.50	0.20	5,579.63	0.21	281.24	0.03	48.37	0.01	0.00	0.00	1,400.59	0.13
		91,300.00	0.40	127,000.00	0.50	41,500.00	0.20	300.00	0.00	25,000.00	0.12	27,925.00	0.12
		81,900.00	0.32	50,500.00	0.24	20,000.00	0.08	0.00	0.00	700.00	0.00	8,575.00	0.04
		85,166.67	0.37	92,166.67	0.38	28,166.67	0.12	100.00	0.00	9,566.67	0.04	19,200.00	0.08
		5,315.39	0.04	38,705.08	0.13	11,644.03	0.07	173.21	0.00	13,415.04	0.07	9,813.93	0.04
		48,100.00	0.86	108,000.00	0.67	8,952.00	0.12	50.00	0.00	50.00	0.01	3,430.00	0.84
		220.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	458.00	0.01
		13,272.25	0.55	12,264.80	0.26	1,340.85	0.04	7.50	0.00	5.00	0.00	1,761.70	0.15
		12,510.8	0.25	26,153.14	0.26	2,232.31	0.04	13.72	0.00	15.39	0.00	875.00	0.18
		66,750.00	0.44	100,000.00	0.58	11,208.00	0.08	1,000.00	0.02	1,000.00	0.01	7,500.00	0.86
		532.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,230.00	0.04
		29,583.50	0.33	44,935.00	0.32	4,622.17	0.04	246.67	0.00	320.00	0.00	4,788.00	0.25
		29,865.30	0.11	47,563.92	0.27	4,981.66	0.03	416.01	0.01	379.47	0.00	2,177.02	0.32
		425,000.00	0.91	195,000.00	0.71	4,116.00	0.13	3,000.00	0.01	31,000.00	0.05	91,240.00	0.39
		2,404.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	125.00	0.01
		82,675.95	0.66	36,487.04	0.17	1,136.47	0.05	365.50	0.00	5,264.29	0.01	15,078.38	0.11
		145,712.07	0.20	70,514.37	0.21	1,209.13	0.04	852.55	0.00	11,153.12	0.02	27,812.70	0.08
		29,300.00	0.85	19,500.00	0.38	3,800.00	0.14	40.00	0.00	10.00	0.01	3,500.00	0.17
		1,150.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	122.50	0.07
		14,550.00	0.68	3,294.00	0.17	1,175.00	0.05	16.50	0.00	3.00	0.00	1,867.75	0.10
		9,993.72	0.15	6,541.73	0.18	1,265.8	0.05	15.10	0.00	4.83	0.00	1,167.29	0.03
		108,500.00	0.97	78,000.00	0.68	6,311.00	0.15	200.00	0.01	1,300.00	0.35	16,725.00	0.35
		1,200.00	0.11	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	276.00	0.03
		17,596.17	0.55	10,320.83	0.19	1,702.83	0.07	44.17	0.00	291.67	0.03	3,851.75	0.15
		29,620.89	0.28	22,120.47	0.24	1,991.53	0.05	75.13	0.00	531.65	0.10	5,042.54	0.09

4 - 13 , . , , .

18% , (39%), (24%) (21%) . (281%) , 가 (25%) .

235% , (354%) (335%) . (2,715%) , 가 (20%)

68% , (194%) (77%) . (800%) , 가 (3%) .

0.81 , (1.81) (1.07) . (5.86) , 가 (0.90) .

26% 0.95 , 20% 0.52 . 가 51% , 가 -9% . 35% 84% , 36% 96% . 36% 1.56 , 189% 0.96 . 가 79% , 가 -450% . 85% 156% , 61% 164%

4-13.

				()	
		0.75	27.27	5.86	8.00
		(2.08)	0.00	0.00	0.00
		0.18	2.35	0.81	0.68
		0.43	4.66	0.91	0.95
		0.21	0.20	1.31	1.00
		(0.04)	0.00	0.00	0.40
		0.08	0.10	0.55	0.77
		0.18	0.14	0.68	0.32
		0.73	14.00	3.40	1.64
		(2.08)	0.00	0.00	0.00
		0.14	2.07	0.70	0.72
		0.55	4.16	0.71	0.44
		0.70	1.00	4.08	0.08
		0.15	0.50	0.63	0.05
		0.39	0.83	1.81	0.07
		0.28	0.29	1.97	0.01
		0.73	27.27	5.86	1.06
		(0.08)	0.13	0.00	0.05
		0.21	3.54	1.07	0.43
		0.20	6.80	1.41	0.33
		0.75	7.33	0.90	8.00
		(0.16)	0.04	0.00	0.00
		0.24	3.35	0.39	1.94
		0.32	3.69	0.38	2.59
		0.73	8.00	2.03	1.79
		(0.47)	0.00	0.00	0.00
		0.19	1.57	0.79	0.44
		0.40	2.56	0.55	0.48
		0.51	1.00	2.00	2.45
		(0.09)	0.00	0.00	0.00
		0.26	0.35	0.95	0.84
		0.20	0.36	0.52	0.96
		0.79	1.67	3.55	5.04
		(4.50)	0.00	0.05	0.21
		(0.36)	0.85	0.95	1.56
		1.89	0.61	0.96	1.64

) 가 가

4-14 가 ,

, 가

74,495.86 , 가 가

(450,000.00) (124,319.74

) (76,494.84) 가

가 가 (524,017.00) , 가

(67,212.00) .

가 9,971.31 ,

가 가

(40,421.20), (26,417.00) (17,808.40) .

가 가

(183,706.00) , 가 (23,914.60) .

4-14. 가 (:)

		700,000.00	183,706.00
		0.00	0.00
		74,495.86	9,971.31
		134,218.82	27,662.91
		67,212.00	52,834.00
		0.00	0.00
		33,606.00	26,417.00
		47,526.06	37,359.28
		81,309.00	23,914.60
		3,000.00	0.00
		28,589.38	5,212.48
		15,965.89	7,997.16
		700,000.00	0.00
		300,000.00	0.00
		450,000.00	0.00
		217,944.95	0.00
		248,390.00	167,172.00
		0.00	0.00
		41,523.69	17,808.40
		58,334.28	42,212.26

가

(:)

		159,020.00	183,706.00
		5,010.50	0.00
		76,494.8	40,421.20
		70,937.90	80,314.83
		530,000.00	33,105.00
		5,983.00	0.00
		124,319.7	5,777.66
		186,375.53	10,899.38
		70,834.00	57,300.00
		0.00	0.00
		30,658.78	11,172.22
		25,437.91	22,445.73
		280,000.00	20,000.00
		2,400.00	0.00
		66,142.80	2,436.36
		87,601.40	6,172.08

4-15 가 , 가

, , . 가

56,064.13 , 가

가 (187,735.78),

(76,905.33), (67,038.21) 가

가가 (169,517.01) , 가

(34,357.97) .

가 746.77 ,

가 가

(3,150.56), (2,010.87) (1,245.23) .

가 가가 (9,263.19)

, 가 (212.47) .

가 8,628.35 , 가 가

가 (22,837.33),

(19,050.00) (18,763.21) 가

가가 (14,845.83) , 가가

(9,251.39) .

20,202.22 0 ,

19,481.22 0 .

가 60,000.00 .

33,204.27 2,972.73

, 47,350.91 5,740.05 .

가 171,500.00 .

4-15.

가

(:)

		688,000.00	26,680.00	30,000.00
		0.00	0.00	0.00
		56,064.13	746.77	8,628.35
		141,260.35	3,388.77	8,885.98
		20,000.00	0.00	1,500.00
		2,000.00	0.00	0.00
		11,000.00	0.00	500.00
		12,727.92	0.00	866.03
		53,189.00	4,150.00	24,700.00
		0.00	0.00	0.00
		14,662.07	216.25	7,429.59
		13,104.40	770.98	7,704.24
		572,600.00	0.00	28,000.00
		200,000.00	0.00	24,000.00
		332,500.00	0.00	25,666.67
		208,305.09	0.00	2,081.67
		55,530.00	26,680.00	24,900.00
		400.00	0.00	0.00
		17,011.70	1,999.00	10,012.50
		12,008.13	6,247.33	7,853.16
		154,511.00	15,300.00	19,500.00
		7,300.00	0.00	0.00
		45,797.00	3,060.00	6,000.00
		61,316.79	6,842.37	7,906.01
		688,000.00	10,000.00	30,000.00
		0.00	0.00	0.00
		116,384.37	344.83	8,900.00
		224,061.23	1,856.95	10,153.92
		60,000.00	0.00	15,000.00
		3,000.00	0.00	0.00
		20,202.22	0.00	6,944.44
		19,481.22	0.00	6,356.32
		171,500.00	18,000.00	25,000.00
		0.00	0.00	0.00
		33,204.27	2,972.73	13,245.45
		47,350.91	5,740.05	7,263.80

3)

가)

4-16

4-16

5.66

가 (6.42) ,

(5.15) .

가 7.93 , 가

2.57 .

가 (2.27) ,

가

(2.14) .

4.75

가

7.00 가

2.00

2.22 .

4-16.

(: ,)

		7.93	0.00	7.90	7.93	0.00
		2.57	0.00	2.57	4.90	0.00
		5.66	-	5.15	6.42	-
		2.28	-	2.67	2.14	-
		7.00	0.00	7.00	-	0.00
		2.00	0.00	2.00	-	0.00
		4.75	-	4.75	-	-
		2.22	-	2.22	-	-

)

4-17

(35.69ha) . 24.07ha ,
 가가 (7.75ha) ,
 가가 (33.69ha) .
 12,000,000.00 , (25,000,000.00)

) . 142.12 ,
 (292.30) . 가가 (17.82) ,
 가가 (237.75) .

54.40 (45.1%), 34.00 (28.2%), 32.33 (26.8%) .
 (100%), (58.5%), (45.3%)
 41.5% .

4-17.

(: ha, ,)

	91.00	25,000,000.00	0840.00	245.00	160.00	65.3%	38.00	15.5%	47.00	19.2%	
	1.10	5,000,000.00	0.00	61.00	21.00	34.4%	30.00	49.2%	10.00	16.4%	
	24.07	12,000,000.00	142.12	120.73	54.40	45.1%	34.00	28.2%	32.33	26.8%	
	25.08	11,269,427.67	189.14	56.48	31.17	55.2%	5.66	10.0%	19.66	34.8%	
	19.50	-	72.00	72.00	72.00	100.0%	0.00	0.0%	0.00	0.0%	
	2.00	-	23.00	60.00	60.00	100.0%	0.00	0.0%	0.00	0.0%	
	13.13	-	53.25	65.50	65.50	100.0%	-	0.0%	-	0.0%	
	7.75	-	22.60	5.92	5.92	100.0%	-	0.0%	-	0.0%	
	91.00	25,000,000.00	55.00	201.00	123.00	61.2%	38.00	18.9%	40.00	19.9%	
	4.50	25,000,000.00	10.00	61.00	21.00	34.4%	30.00	49.2%	10.00	16.4%	
	35.69	25,000,000.00	35.88	107.86	48.86	45.3%	34.00	31.5%	25.00	23.2%	
	33.69	-	17.82	61.71	34.84	56.5%	5.66	9.2%	21.21	34.4%	
	46.10	6,000,000.00	142.00	207.00	160.00	77.3%	0.00	0.0%	47.00	22.7%	
	5.00	6,000,000.00	12.00	68.00	21.00	30.9%	0.00	0.0%	47.00	69.1%	
	17.73	6,000,000.00	68.00	113.25	66.25	58.5%	-	0.0%	47.00	41.5%	
	19.22	-	64.48	63.91	63.91	100.0%	-	0.0%	-	0.0%	
	75.80	5,000,000.00	840.00	70.00	70.00	100.0%	0.00	0.0%	-	0.0%	
	1.10	5,000,000.00	0.00	30.00	30.00	100.0%	0.00	0.0%	-	0.0%	
	21.70	5,000,000.00	292.30	49.10	49.10	100.0%	-	0.0%	-	0.0%	
	22.88	-	237.75	15.34	15.34	100.0%	-	0.0%	-	0.0%	

4 - 18

18 (41.9%), 2 (4.7%), 15 (34.9%), 1 (2.3%), 7 (16.3%) .

4-18.

(:)

	43	18	41.9%	2	4.7%	15	34.9%	1	2.3%	7	16.3%
	10	3	30.0%	0	0.0%	6	60.0%	0	0.0%	1	10.0%
	13	4	30.8%	1	7.7%	8	61.5%	0	0.0%	0	0.0%
	8	2	25.0%	1	12.5%	1	12.5%	1	12.5%	3	37.5%
	12	9	75.0%	0	0.0%	0	0.0%	0	0.0%	3	25.0%

가 (75.0%)

(12.5%) (7.7%) (61.5%), (12.5%)가 .

)

4-19

17,540.38

(28,600.00) , 가

(5,812.50) .

가가 (23,804.76)

, 가가 (4,365.47) .

4-19.

(:)

		50,000.00	1.00	210,000.00	1.00
		0.00	0.00	0.00	0.00
		17,540.38	0.61	22,903.85	0.39
		16,832.42	0.43	47,888.21	0.43
		12,000.00	1.00	10,000.00	0.78
		2,000.00	0.22	0.00	0.00
		5,812.50	0.47	6,375.00	0.53
		4,365.47	0.36	4,422.95	0.36
		40,000.00	1.00	120,000.00	1.00
		0.00	0.00	0.00	0.00
		10,850.00	0.31	38,125.00	0.69
		14,345.03	0.38	43,910.42	0.38
		50,000.00	0.67	210,000.00	1.00
		0.00	0.00	0.00	0.33
		15,000.00	0.24	66,250.00	0.76
		23,804.76	0.37	96,727.71	0.37
		48,000.00	1.00	0.00	0.00
		10,000.00	1.00	0.00	0.00
		28,600.00	1.00	0.00	0.00
		13,858.01	0.00	0.00	0.00

22,903.85 .
 (66,250.00) ,
 (38,125.00) , 가 (00.00) .
 가가 (96,727.71) , 가가
 (00.00) .
 39% .

4-20 , ,
 . 5,671.15 .
 (22,500.00) , (5,962.50) .
 가가 (45,000.00) , 가가
 (00.00) .

4-20. (:)

		90,000.00	1.00	0.00	0.00
		0.00	1.00	0.00	0.00
		5,671.15	1.00	0.00	0.00
		18,926.06	0.00	0.00	0.00
		3,500.00	1.00	0.00	0.00
		0.00	1.00	0.00	0.00
		2,437.50	1.00	0.00	0.00
		1,637.7	0.00	0.00	0.00
		40,000.00	1.00	0.00	0.00
		0.00	1.00	0.00	0.00
		5,962.50	1.00	0.00	0.00
		14,014.68	0.00	0.00	0.00
		90,000.00	1.00	0.00	0.00
		0.00	1.00	0.00	0.00
		22,500.00	1.00	0.00	0.00
		45,000.00		0.00	
		0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00
		0.00		0.00	
		0.00		0.00	

)

(1)

4-21

81,203.94 ,
 (365,801.34) , 가
 (15,050.00) . 가 가
 (668,489.65) , 가 (17,196.72) .
 26,116.12 ,
 (61,286.50) .
 가 가 (105,047.04) , 가
 (4,878.75) .

4-21.

(:)

		1,368,000.00	303,054.00	1,357,568.00
		0.00	0.00	(303,054.00)
		81,203.94	26,116.12	55,087.82
		265,887.10	61,311.36	274,135.79
		42,000.00	26,000.00	2,000.00
		4,000.00	2,000.00	(16,700.00)
		15,050.00	12,050.00	(6,000.00)
		18,115.28	10,596.07	8,667.56
		200,000.00	303,054.00	86,945.00
		0.00	58.00	(303,054.00)
		52,474.63	61,286.50	(8,811.88)
		69,241.33	105,047.04	122,185.02
		1,368,000.00	10,432.00	1,357,568.00
		11,200.00	0.00	5,350.00
		365,801.34	4,246.75	361,554.59
		668,489.65	4,878.75	664,437.20
		51,360.00	41,440.00	42,000.00
		2,200.00	0.00	(23,680.00)
		16,810.00	12,354.00	4,456.00
		17,196.72	14,261.75	19,309.03

55,087.82 ,
 (361,554.59) (- 8,811.88
) . 가가 (664,437.20)
 , 가가 (8,667.56) .

4-22 , , , , ,
 가 , , .

12,498.00 ,
 (34,175.00) . 가가
 (62,576.17) , 가가 (1,058.30)

8,417.32 ,
 (24,312.50) . 가가
 (43,394.32) , 가가 (0.00) .
 , 905.15 ,

4.15 0.00 .
 가 59.12 , 가
 (384.25) . 가 가가
 (446.71) , 가 (0.00) .

143% ,
 (260%) 가가 (367%) .
 가가 (45%) .
 18% ,
 (100%) (21%) . 가가
 (173%) ,가 (0.00%) .
 0.82 ,
 (1.04) . 가가
 (1.38) ,가 (0.21) .

4-23.

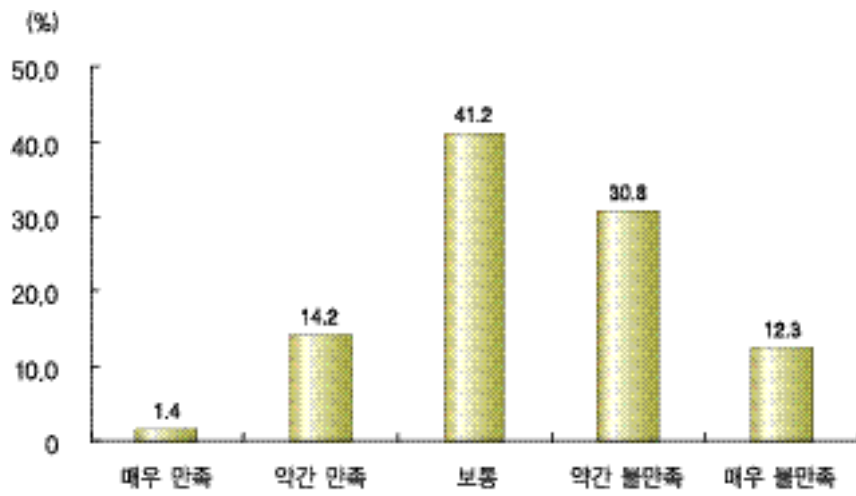
(:)

		()			
		1.00	5.19	3.78	3.00
		(6.09)	0.00	0.00	0.00
		0.10	1.43	0.82	0.18
		1.55	1.95	0.97	0.61
		0.50	1.57	0.93	0.33
		(1.90)	0.67	0.57	0.00
		(0.80)	1.13	0.69	0.21
		1.23	0.45	0.21	0.14
		0.99	5.19	3.78	0.33
		0.43	0.00	0.00	0.00
		0.73	2.60	1.04	0.08
		0.23	3.67	1.38	0.13
		1.00	0.00	0.73	3.00
		0.48	0.00	0.30	0.00
		0.86	0.00	0.49	1.00
		0.25		0.22	1.73
		1.00	0.00	0.00	0.00
		(6.09)	0.00	0.00	0.00
		(0.37)			0.00
		2.16			0.00

1)

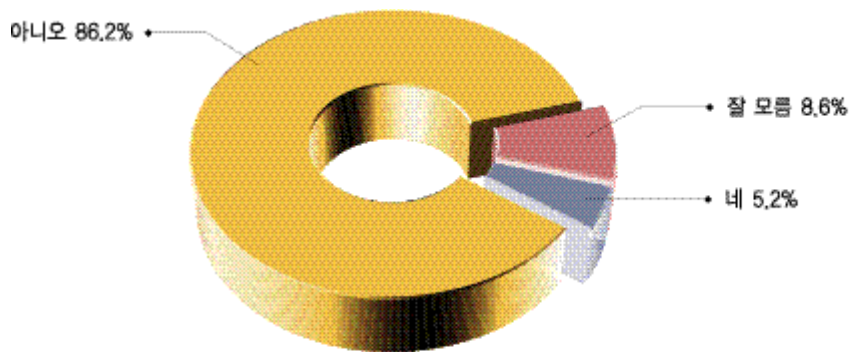
가)

1.4%, “ ” 14.2% “ ” 가 가
 41.2% “ ” “ ”
 30.8%, 12.3% 43.1%
 가 , 가



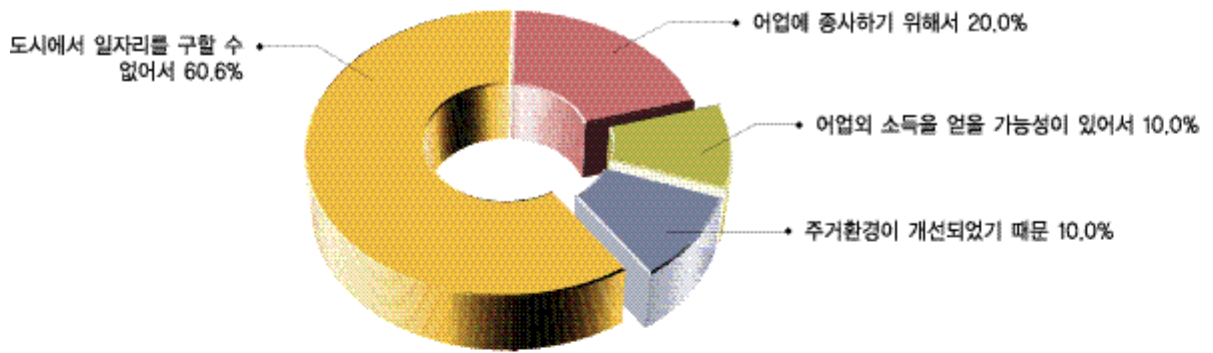
4-1.

가 , 20 ~ 40 가 가
 86.2%가 , 가
 5.2%



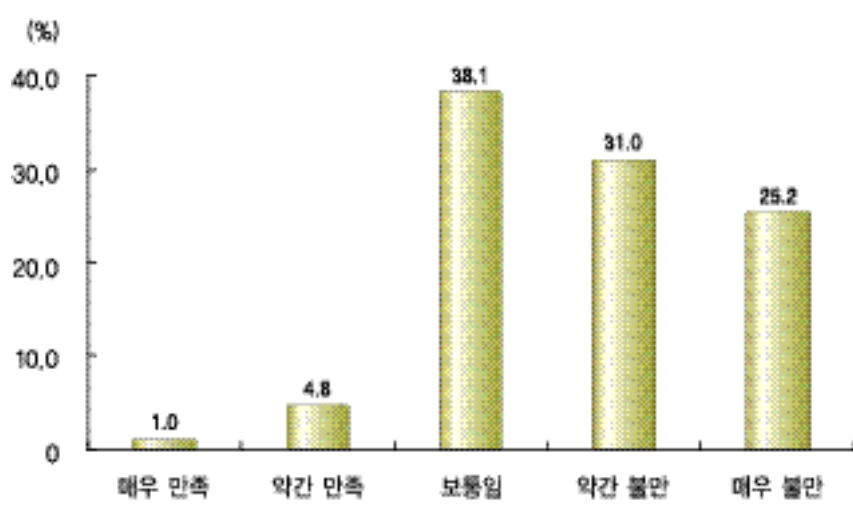
4-2. 가

가
 “ ”가 60.0%
 “ ”가 20.0%
 “ ”가 10%
 “ ”가 10%



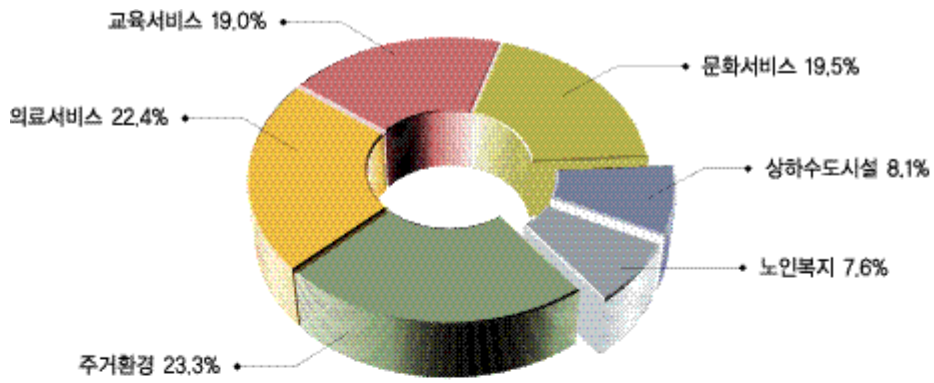
4-3. 가

가 가 ,
 “ ” 가
 38.1% 가
 ” 56.2%
 5.8%



4-4.

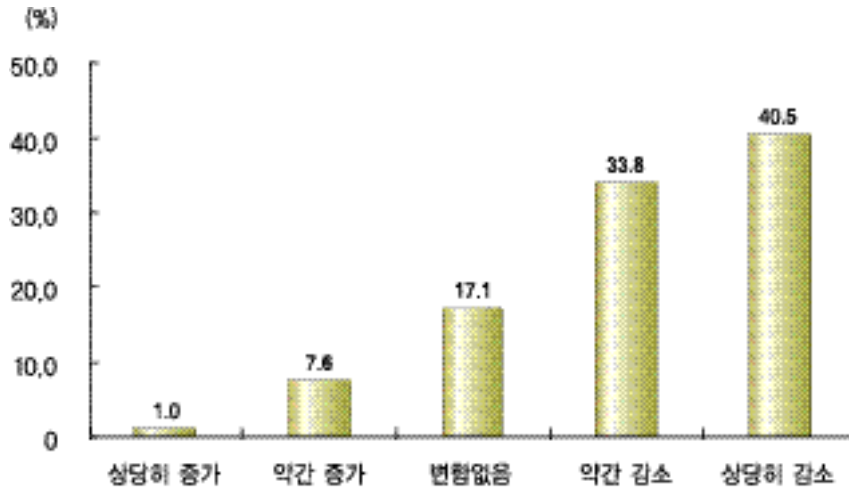
가 “ ” 23.3%가
 , “ ” 22.4%
 “ ” “ ” 19.5%, 19.0%
 , “ ” “ ” 8.1%, 7.6%
 가 가 ,



4-5.

)

5 가 , “ (33.8%)
 40.5%가 “ ” 가



4-6. 5

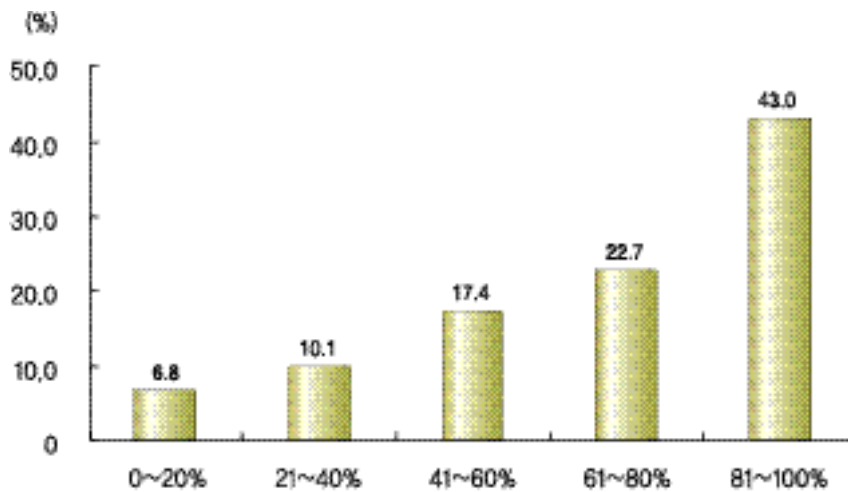
43.0%가 “ 81~100% ”
 “ 61~80% ” 22.7%, “ 41~60% ” 17.4%

65%

EEZ

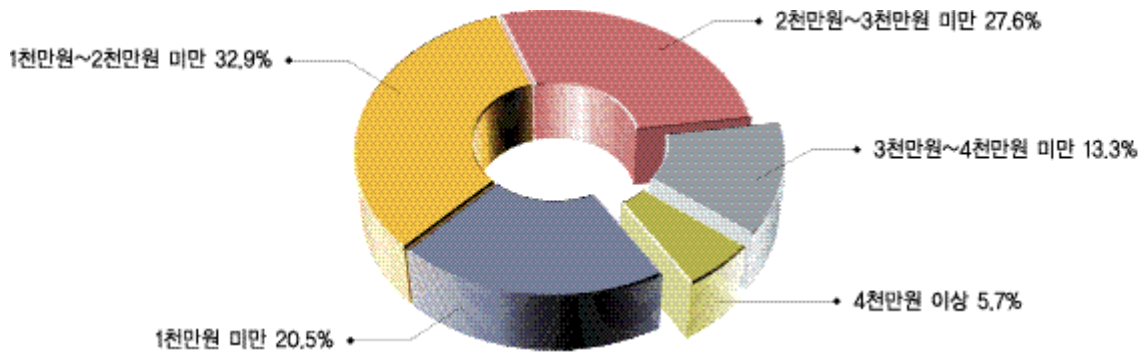
가

가



4-7.

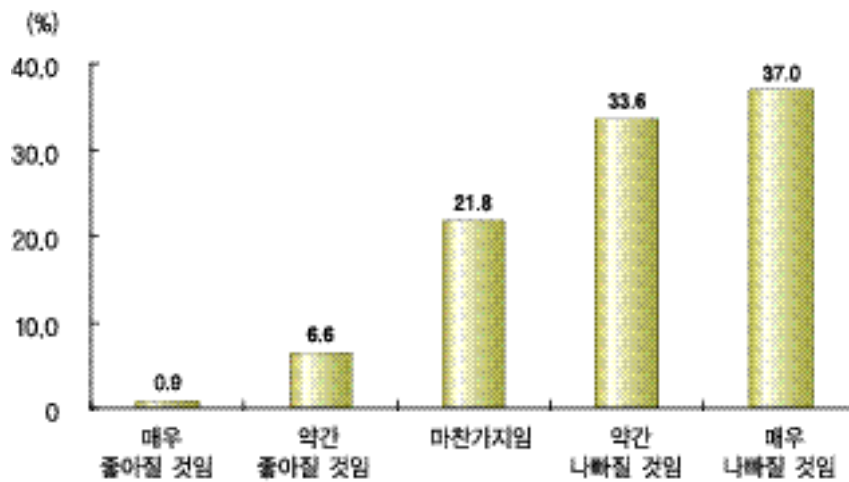
가 “1 ~2 ” 32.9% 가 , “2 ~3 ” 27.6% .
 “1 ” 20.5% ,



4-8.

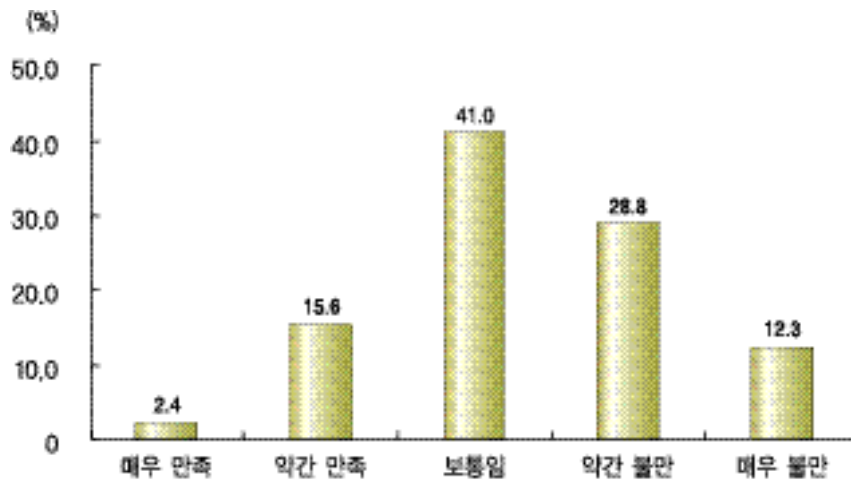
가 , 5
 “ ”
 ” 37.0% 가 , “ ”
 33.6% . , 70.6%가
 , “ 가 ” 21.8% ,
 가 7.5% .

5



4-9. 5

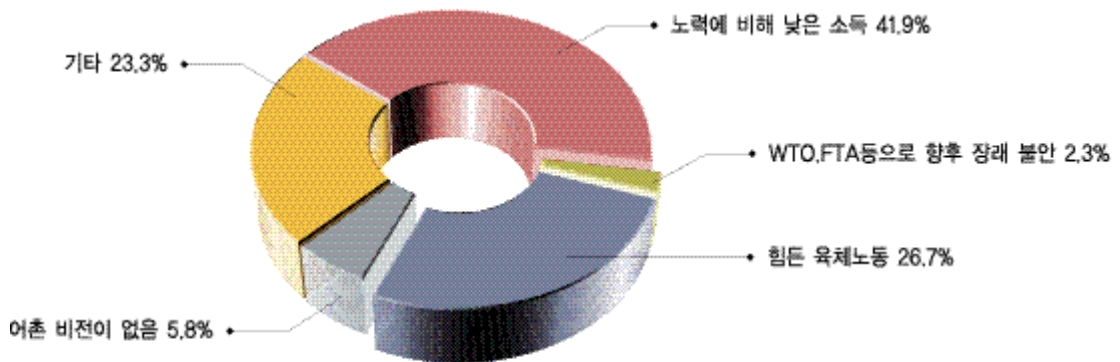
” , 41.0%가“
 18.0% ,
 가 41.1% ,



4-10.

” , 41.9% “
 ” , “ ” 26.7%
 3D

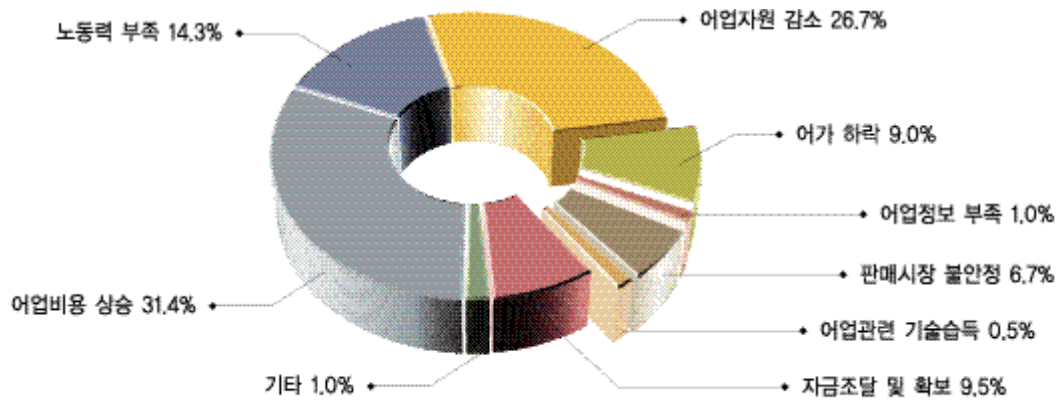
가 ” “WTO, FTA”
 ” 5.8%, 2.3% ,



4-11.

3 “ ” 31.4%가 “ ” 26.7% . “ ” “ ” . 가 14.3% 9.5%

가 , 가 ,

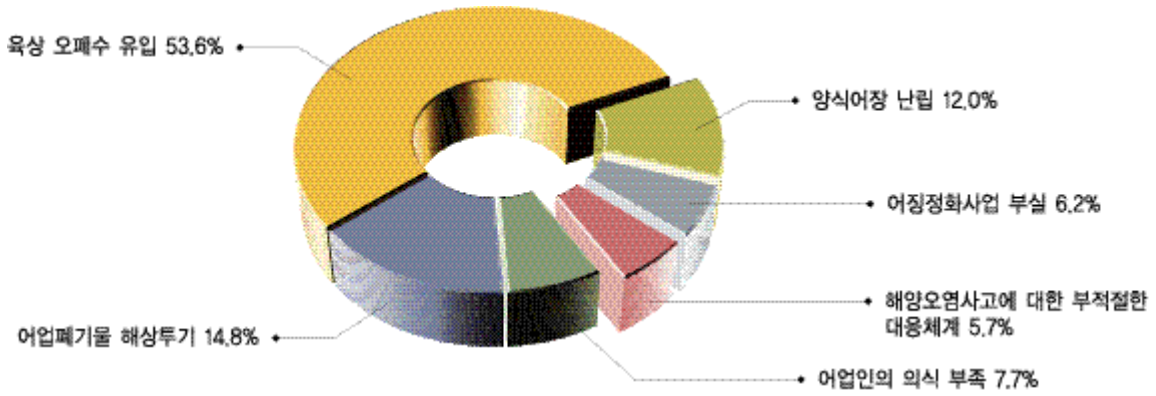


4-12. (3)

)

가 (53.6%)
 “ ” “ ” 14.8% 12.0%

가



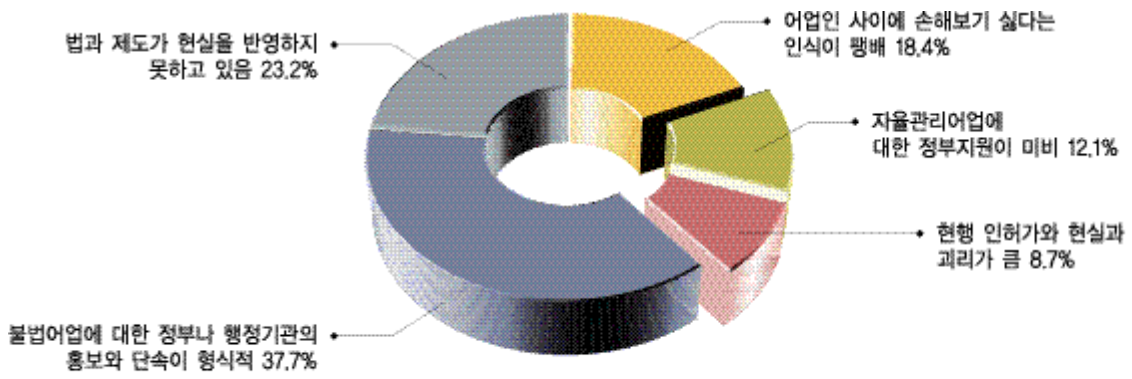
4-13.

가

가

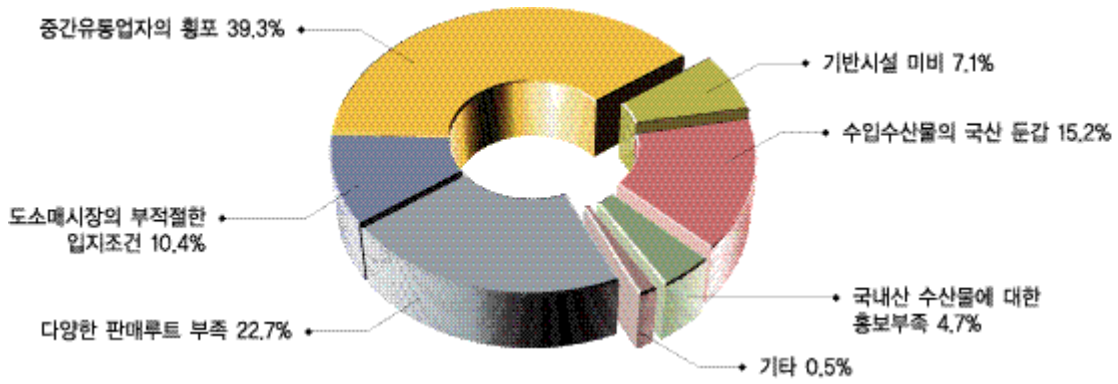
가

“ ” (37.7%)
 “ ” (23.2%)
 “ ” 18.4%
 가



4-14.

가 “ ”
 39.3% 가 “ ” 22.7%
 “ ” “ ”
 15.2% 10.4%



4-15.

가 가 ,

(WTO, WTO)

WTO , (,)

가

가 5.7%, “ ” 28.1%

33.8%

“ ” “ ”

38.6%,

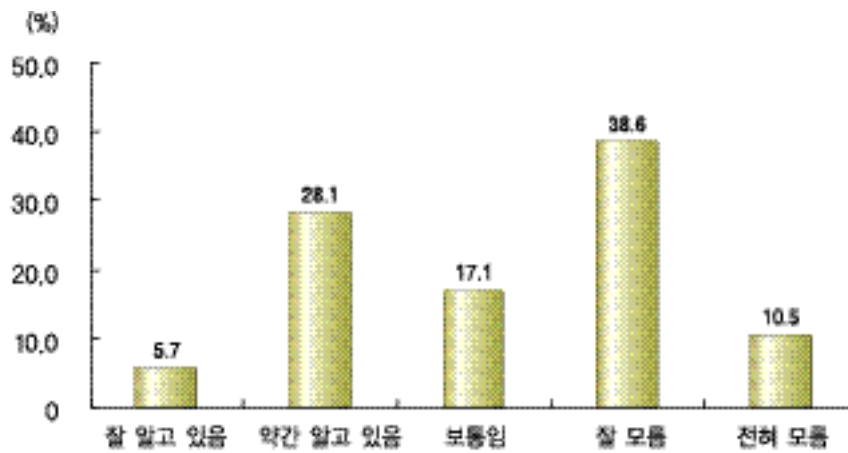
10.5%

49.1%

가

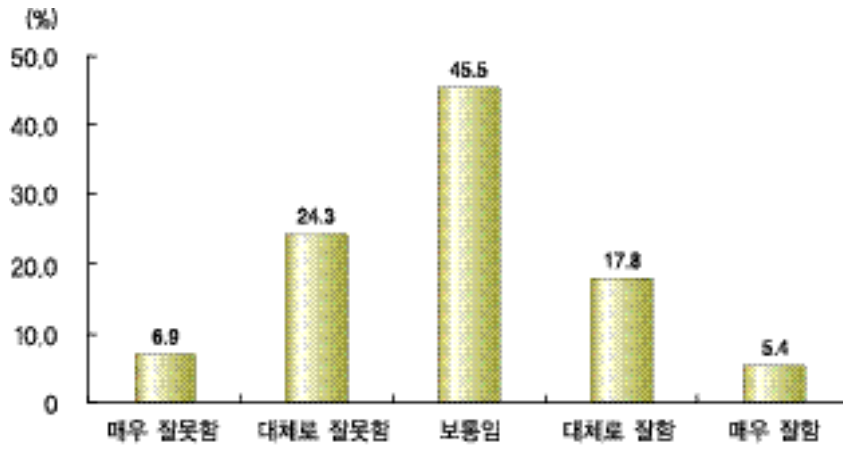
WTO

33.8%



4-16. WTO ()

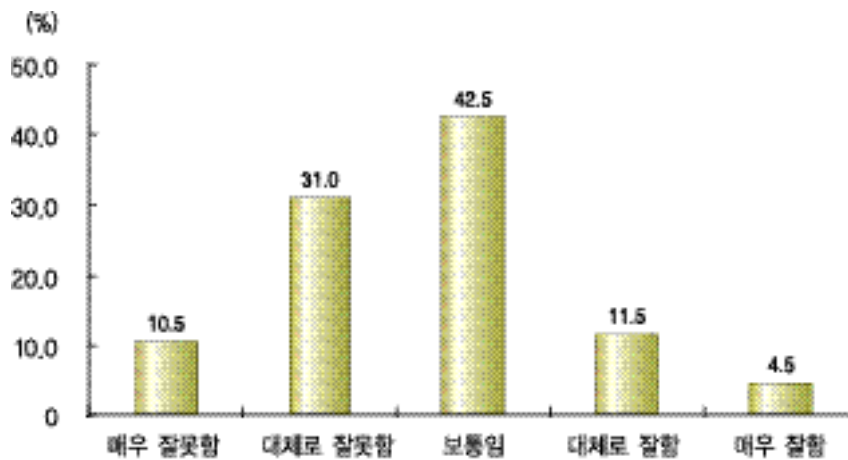
“ ” 가 가 45.5% 가 .
 가 31.2%, 23.2% ,
 가



4-19. 가

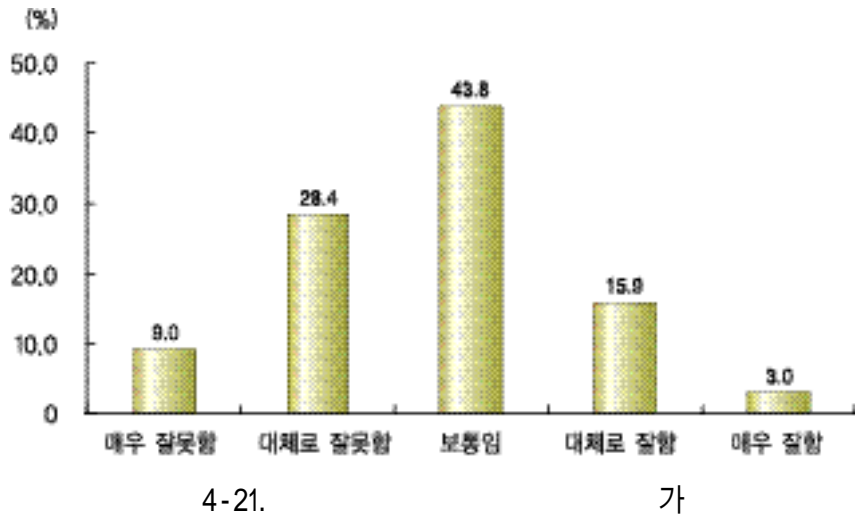
가
 ,
 가
 1980 “
 ” 42.5% 가 “
 ” 31.0%, “ ” “ ”
 ” 10.5% , “ ” “ ”
 11.5%, 4.5% .

가 가 (41.5%)
 (16.0%) .

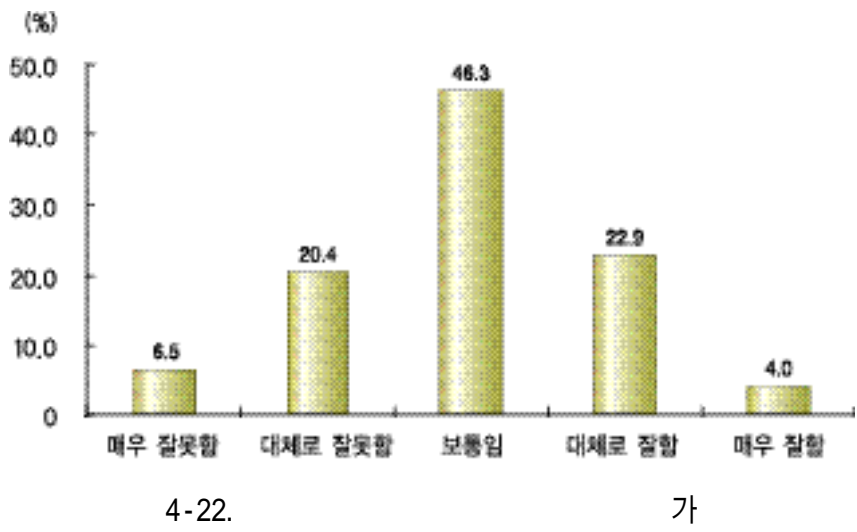


4-20. 가

“ ” 가(43.8%) , “ ” 가 37.4% , “ ” 가 18.9%

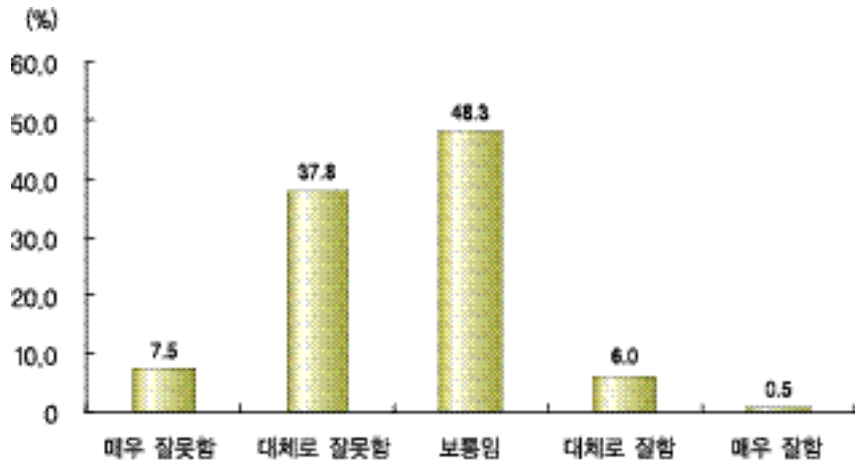


“ ” 가(46.3%) , “ ” 가 26.9% , “ ” 가 26.9%



가 . “ 48.3%가 “ ” 가
 “ 37.8% , ” 7.5% ,
 가 45.3% .

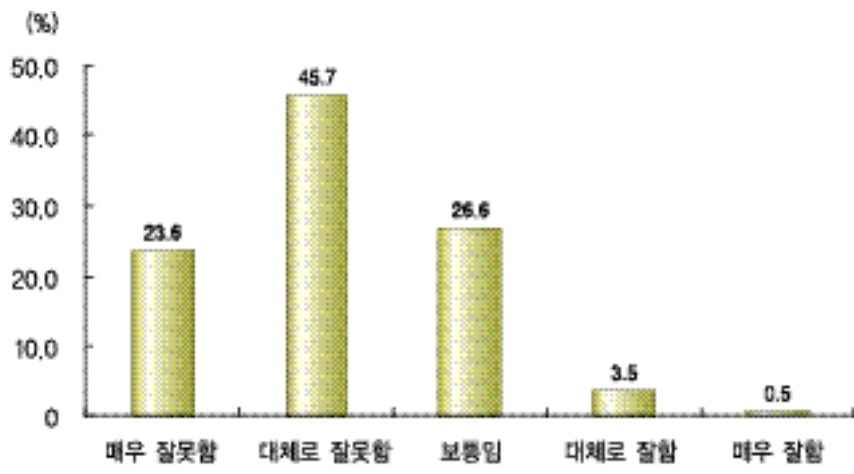
가 가 , . 가
 가 .



4-23. 가

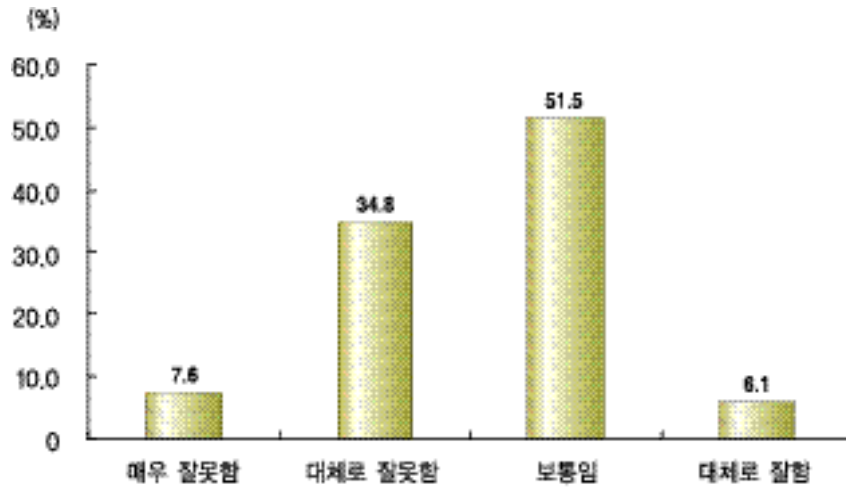
WTO , FTA 가
 가

” 가 가 “ ” 23.6% , 가
 69.3% . “ ” 가 26.6% ,
 ” “ ” 가 4.0% ,



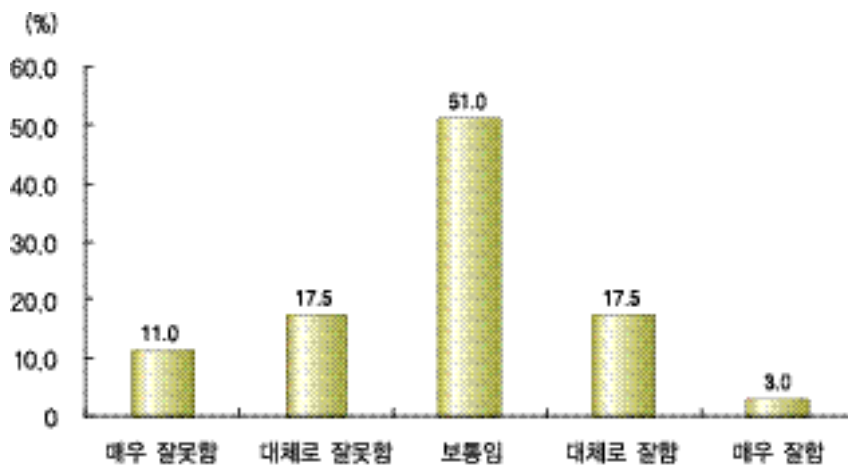
4-24. 가

가 . “ ” 가 34.8%, “ ” 가 7.6%, “ ” 가 6.1%, “ ” 가 6.1%, “ ” 가 51.5%



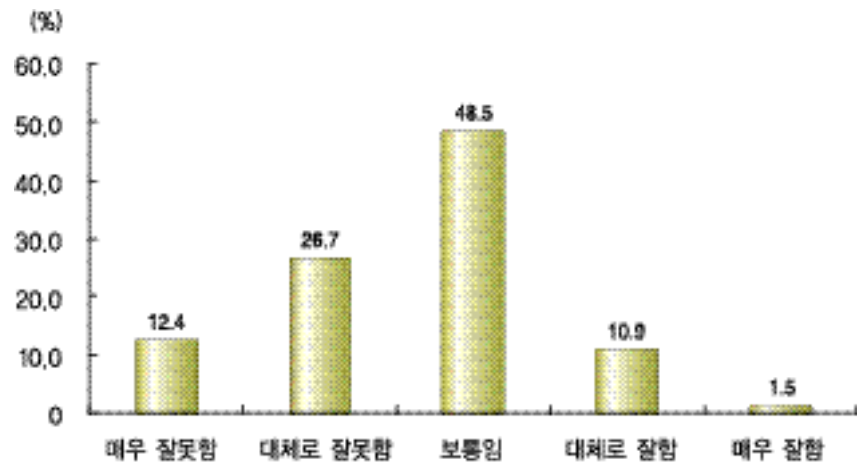
4-25. 가 . 가

가 11.0% , 가 51.0% 가 17.5% , 가 20.5% , 가 3.0%



4-26. 가

가
 가 , (48.5%) 가
 가 “ ”12.4% ,
 가 39.1% “ ” 10.9% ,
 1.5% 12.4% .
 가
 가 , 가 가 가
 가



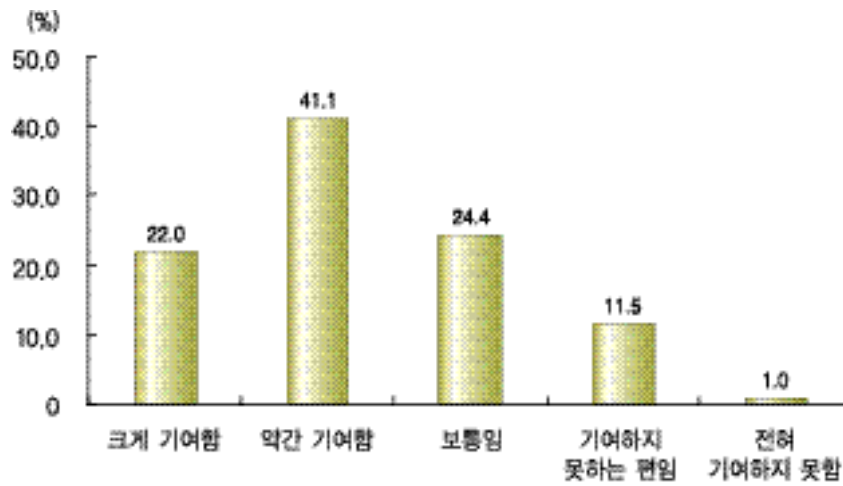
4-27. 가 가

2)

가 , , 가

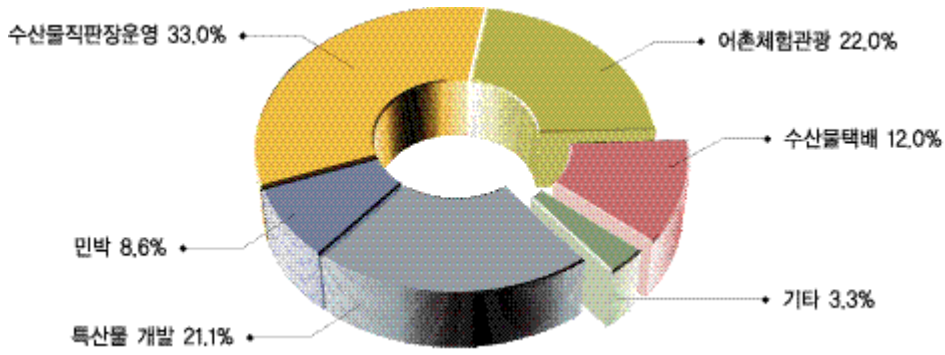
가)

” 가 41.1% “ ” 가
22.0% “ ” “ ” 가
12.5% , 60%



4-28.

가
33.0% “ ” , 22.0% “
”
가
21.1% “ ” “ ”
12.0%, 8.6%

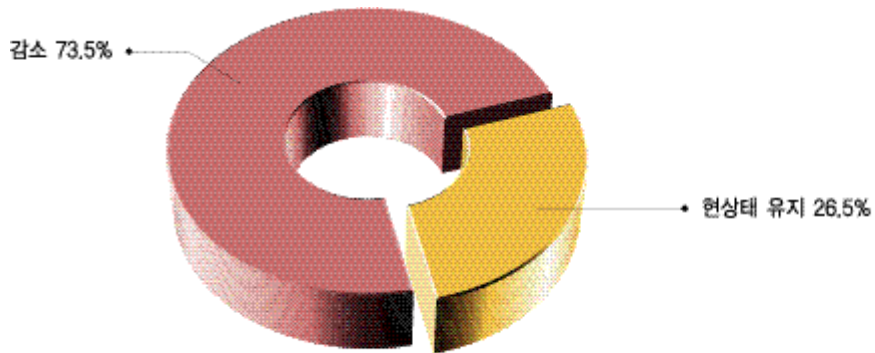


4-29. 가

) 가

가

“ ” 73.5% 가
 “ ” 26.5% .



4-30.

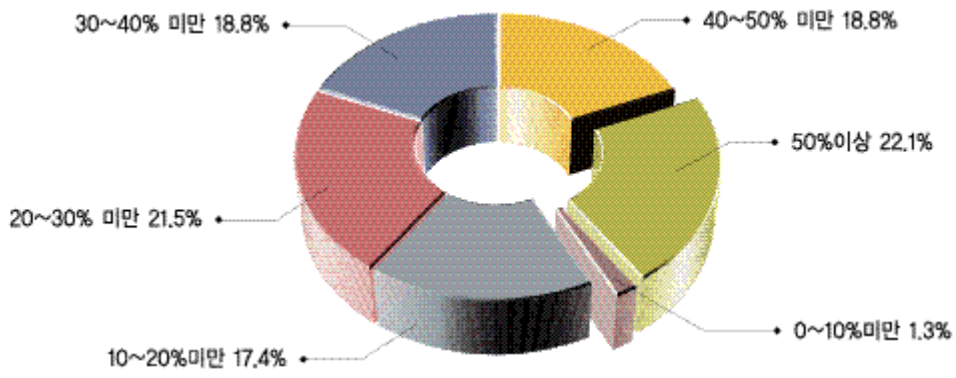
가

가 ,

“ 50% ”

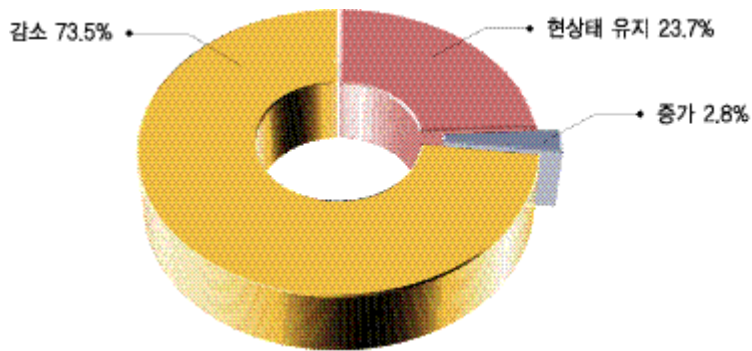
가 22.1% 가 ,
 “ 20~30% ” 21.5% . “ 30~40% ” “ 40~50% ”
 18.8% , “ 10~20% ” 17.4%

30%



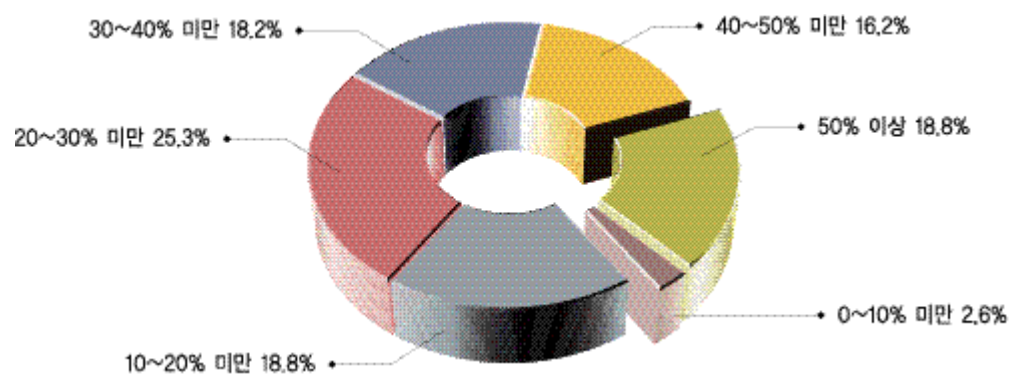
4-31.

가
 가가 가 ,
 “ (73.5%) ,
 ” 23.7% “ 가
 ” 2.8%



4-32. 가

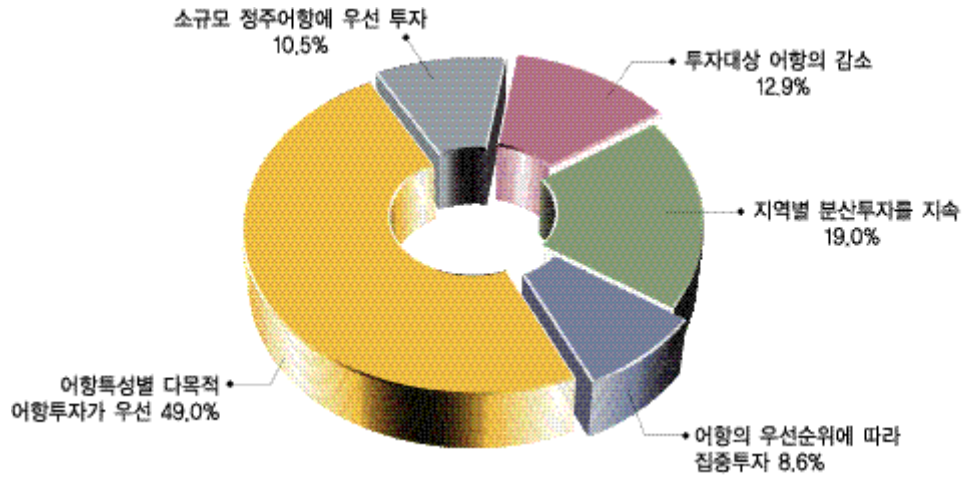
가 가
 , “ 20~30% ” 25.3% 가 ,
 “ 10~20% ” “ 50% ” 18.8% “ 30~40% ”
 “ 40~50% ” 18.2% 16.2%
 가
 “ 20~30% ” 가 ,



4-33. 가

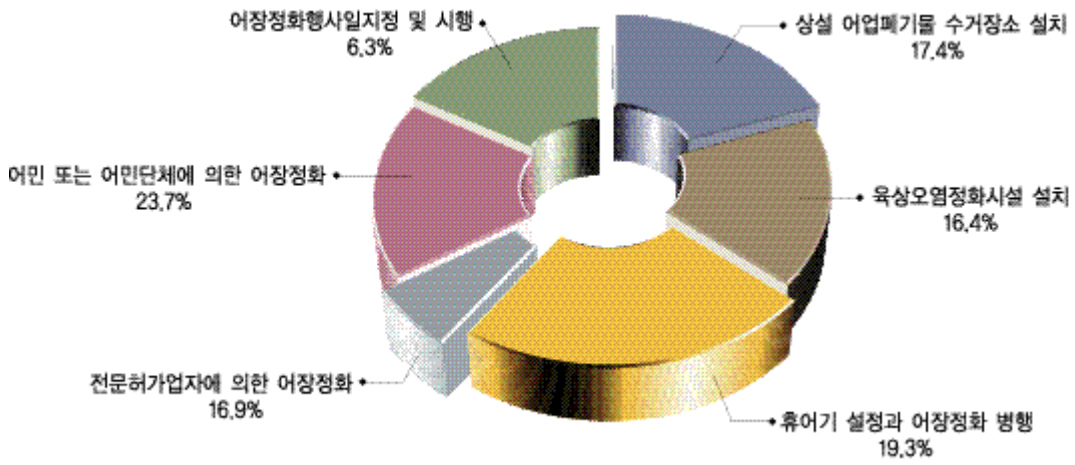
)

가 “ 가 49.0% 가 “
가 19.0% ,



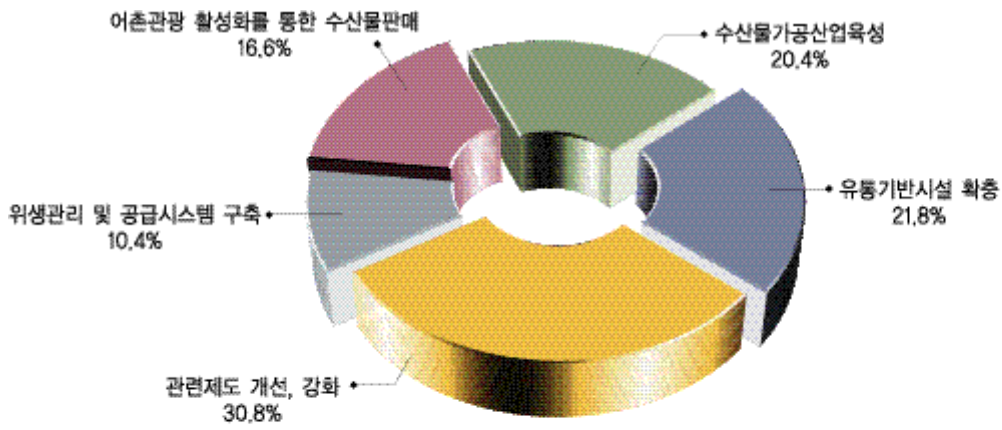
4-34.

가 가 “ (23.7%)가
 가 “ , “
 ” 19.3% . “
 ” “ 가 ” 17.4%,
 16.9%, 16.4% .
 ” 가 ,
 가 .



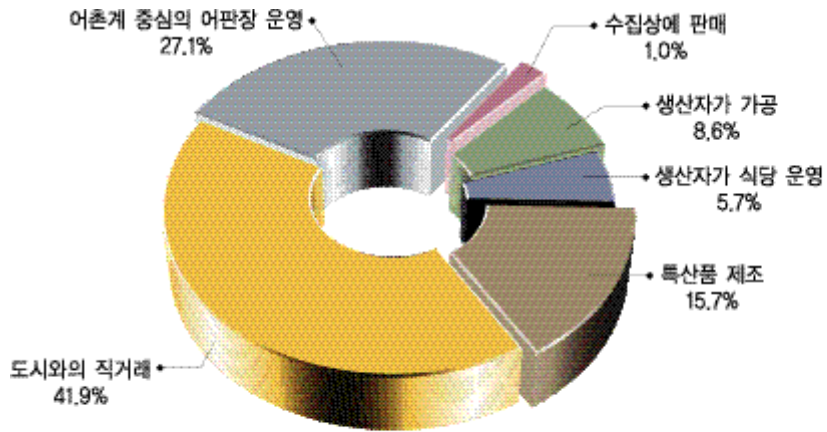
4-35.

가 가 . 가
 “ , ”
 30.8% 가 , “ , ”
 (21.8%) “ 가 (20.4%) . “
 . ” 10.4% .



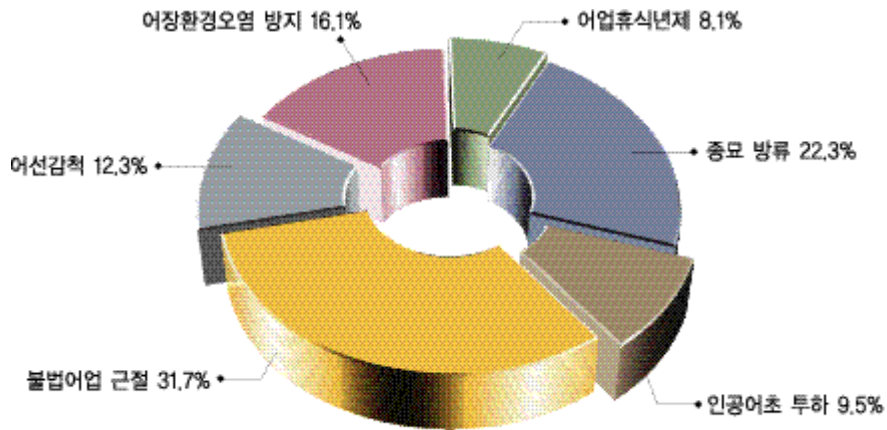
4-36.

가 가 . ()
 가 가
 가 41.9%가 “ ” “
 ” 27.1% ,
 가 .
 “ ” 가가
 15.7% , “ 가 가 ” “ 가 ”
 10% .



4-37. 가가 ()

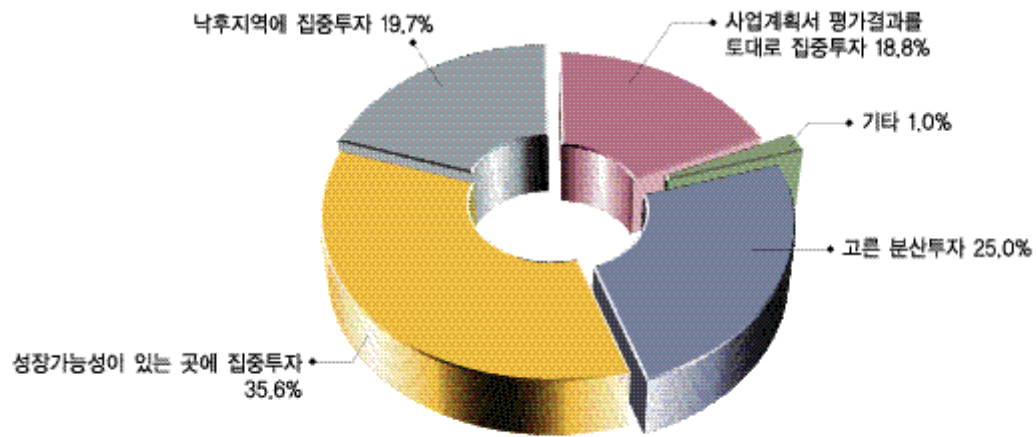
“ (31.7%) ”
 가 . “ ” 16.1%
 ” , 22.3% , “ ” 10%
 “ ” “ ”



4-38.

가
 , “ (25.6%) 가 , “
 (21.8%) “
 ” “ 가
 19.9%, 18.5%
 가 . ,

) 가 가 , 가 가
 가 , 가
 가 “ 가 (35.6%)
 가 “ 가 25.0% , “
 ” 19.7% “
 가 ” 18.8% .
 가



4-41.

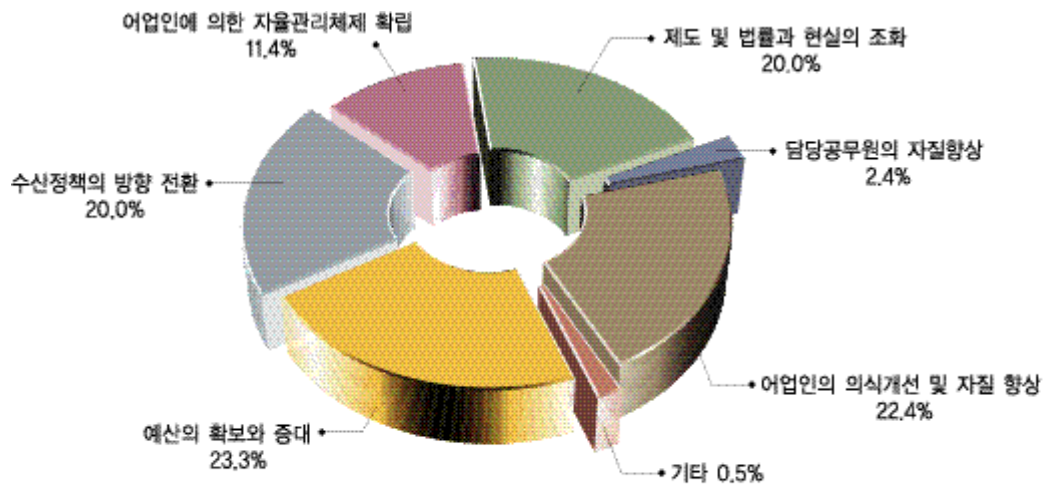
가 가 가
 가 ,
 가 가 , “ ”
 “ ” 18.4%, 18.2% “
 ” “ ” 16.2%, 13.8%
 11 “ ” “ 가
 ” 1.5%
 가

4-23.

		(%)
	407	100.0
	66	16.2
	75	18.4
	74	18.2
	36	8.8
	56	13.8
	31	7.6
	12	2.9
	12	2.9
가 .	33	8.1
	6	1.5
가	6	1.5

:

“ ” 23.3% “ ” 22.4% “ ” 20.0% 가 “ ” 11.4%, “ ” 2.4%



4-42.

()

"			
"	"		"
"	"		"
"	"		"
"	"		"
"	"		"
"	"		"
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2004 11

Korean Coastal and Offshore Fishery Census

2004 12 5

2004 12 20

⋮
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⋮ , ,
⋮
⋮

