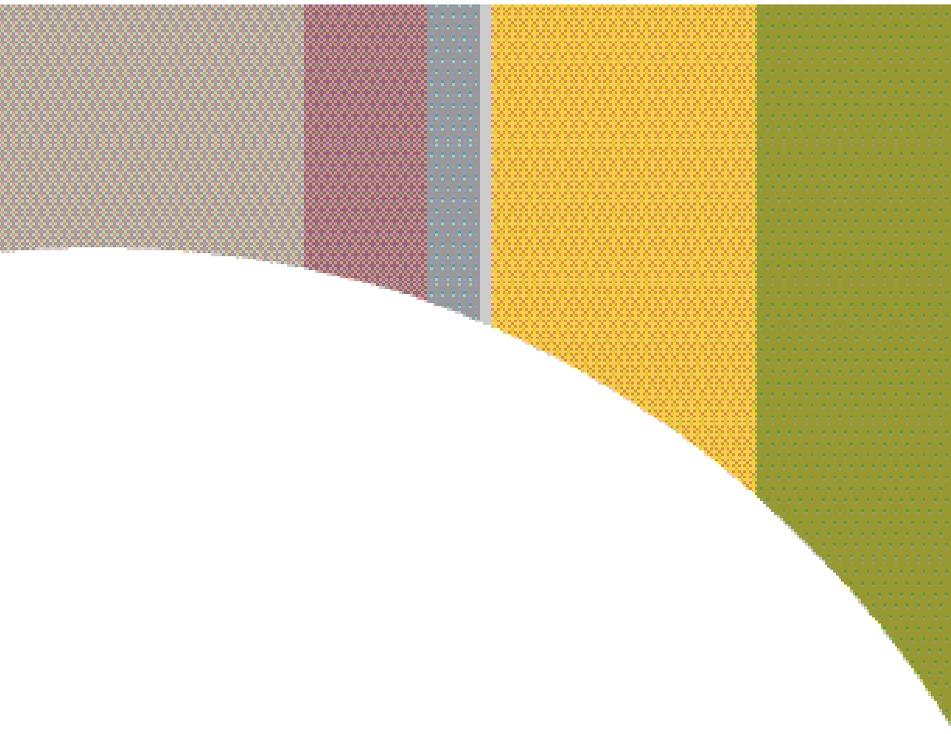


Korean Coastal and Offshore Fishery Census



[]



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

,
, 2002 5 ,
, ()
, ,
.

, 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
	.	25
2.	가.	
	1)	27
	가)	27
	)	38
	)	46
	)	59
	)	65
	)	69
	)	75

)	.....	79
)	.....	83
2)	.....	86
가)	.....	86
)	.....	90
)	.....	92
)	()	97
)	()	99
3)	.....	101
가)	.....	101
)	.....	103
)	.....	106
)	.....	108
)	.....	108
4)	.....	109
.		
1)	.....	110
2)	.....	111
3.		
가.		
1)	.....	123
2)	.....	125
.		
1)	.....	126
2)	.....	127
3)	.....	128

4.			
가.			
1)		.....	173
가)		.....	173
)		.....	174
)		.....	179
2)		.....	188
가)		.....	188
)		.....	189
)		.....	192
)	가	가	.....
			196
.			
1)		.....	199
가)		.....	199
)		.....	202
)		.....	206
)		가	.....
			208
2)		.....	214
가)		.....	214
)	가	.....	215
)		.....	217
)		가	.....
			221

CHAPTER 1

1. 가 .
- 2.
- 3.
- 4.

1. 가 .

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

2.

가. (CPUE)

, 2 . 21
,
2002 10 2003 12 .
, (,), , ()

.
2
, , ,
2002 10
2003 12 가

2002 10 2004

(Mitutoyo, CD-15)
 0.1cm (Sartorius, M-5500S) 0.01g
 (immature), (maturing), (mature), (spent) 4
 (gonadosomatic index : GSI) / ×100

(w)/ (W)x (w)】
 Gilson (Love and Westphal, 1981)

, 50% 가 1cm logistic

3.

가.

3 , 3~5 , 5~8 3
 mm

mm

m

4.

가.

가

가

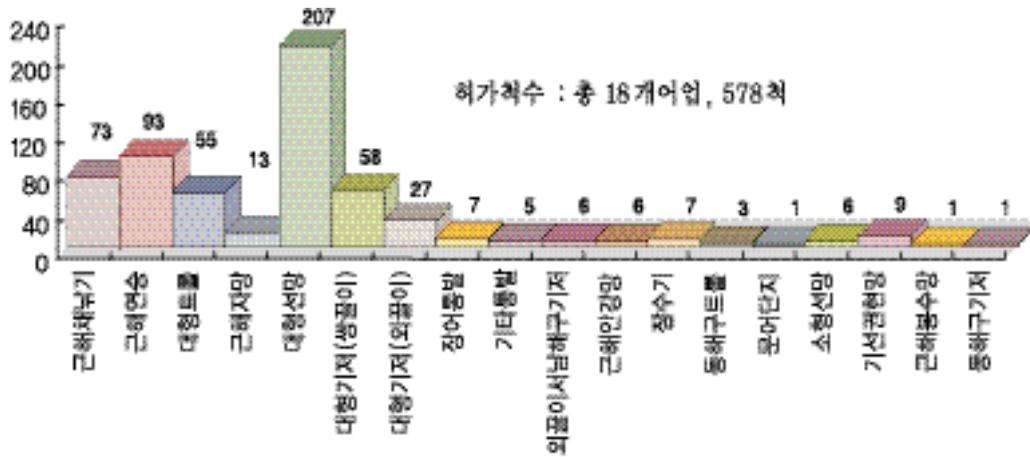
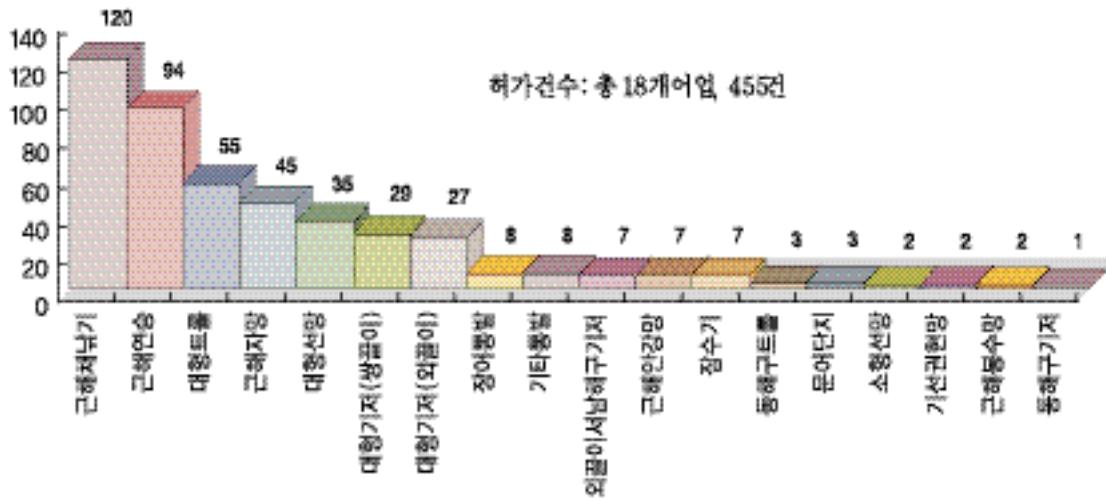
가

CHAPTER 2

1. 가 .
- 2.
- 3.
- 4.

[1. 가 .]

가.



()

1-1. 가

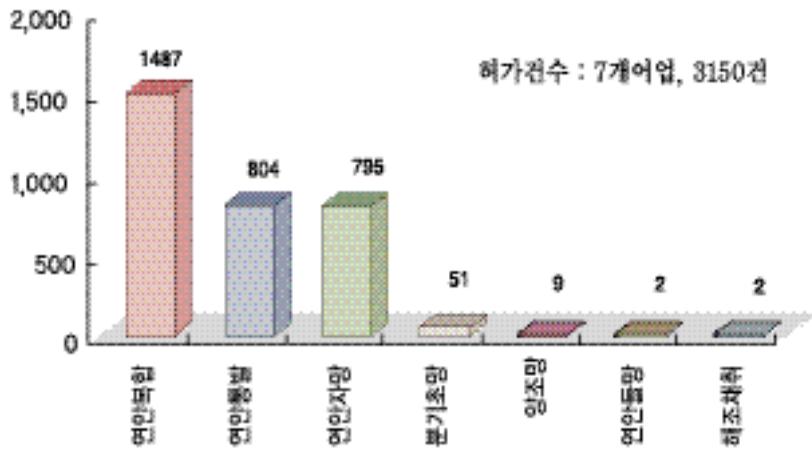
18 , 455 가 , 578 가 가 . 가
 120 가 , 94 , 55 ,
 45 , 35 , () 29 , () 27 .
 가 207 가 , 93 , 73 ,
 () 58 , 55 , () 27 .

1-1.

(: ,)

	1998	1999	2000	2001	2002	2003	
	381,043	417,736	350,538	378,916	391,763	314,979	363,731
	199,694	210,361	166,830	194,049	161,813	146,958	179,956
	84,279	120,963	115,887	120,440	109,489	105,468	109,421
	56,819	52,640	45,897	39,049	37,984	28,113	43,417
	5,882	7,912	5,290	7,197	13,745	7,140	7,861
	7,942	6,290	5,470	3,895	3,889	3,194	5,113
	5,495	4,102	3,124	3,415	3,465	6,518	4,353
	5,490	1,608	643	5,037	2,200	7,159	3,690
	5,204	3,067	2,787	2,791	2,821	2,573	3,207
	3,251	1,142	3,149	1,148	1,887	1,213	1,965
	2,403	3,270	304	1,039	1,057	1,050	1,521
	1,284	4,406	419	366	160	138	1,129
	3,046	1,682	472	71	0	11	880
	108	293	174	16	196	3,343	688
	3	0	92	164	184	1,764	368
	131	0	0	198	83	274	114
	0	0	0	41	171	55	45
	12	0	0	0	0	8	3
	0	0	0	0	2	0	0

(1998~2003) 1999 417,736 가
 , 1998 381,043 , 2001 378,916 , 2000 350,538 , 2002
 2003 339,176 , 314,979 .
 (6) 179,956 가
 , (), , (), .
 2003
 .
 1998 50% .
 2003



1-2. 가

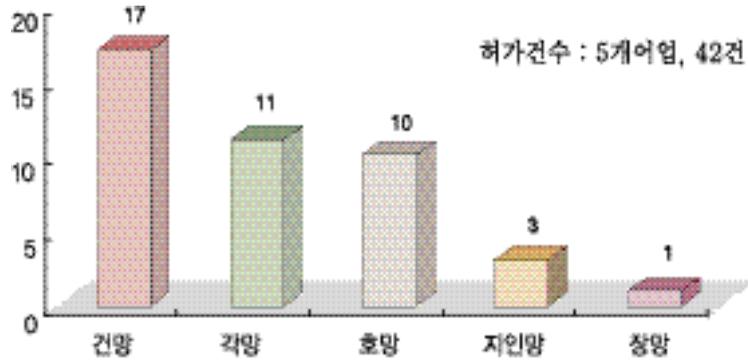
7 , 3,150 가 가 . 가
 1,487 가 , 804 , 795 ,
 51 , 9 , 2

1-2.

(:)

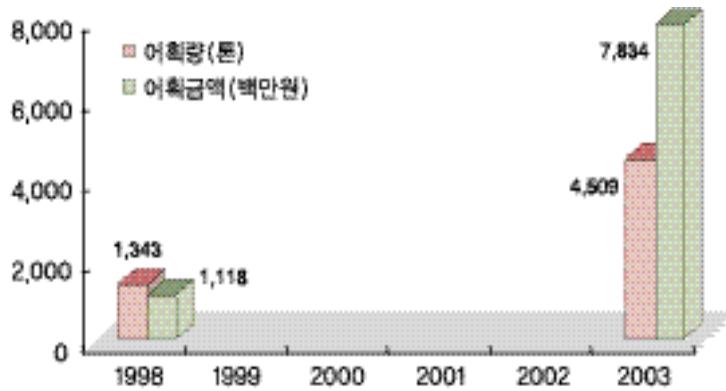
	1998	1999	2000	2001	2002	2003	
	5,343	4,844	5,606	6,937	5,391	8,383	6,084
	61	0	0	0	0	8	12
	571	1,505	973	995	696	0	790
	2,160	1,686	2,265	3,034	1,869	3,433	2,408
	2,060	1,335	1,246	2,362	2,575	1,577	1,859
	7	0	0	0	105	0	19
	484	318	1,054	542	141	0	423
	0	0	68	4	5	0	13
	0	0	0	0	0	3,365	561

(1998~2003) 2003 8,383 가
 , 1999 4,844 가 , 1998 5,343 , 2000 5,606 , 2001
 6,937 , 2002 5,391 .
 (6) 2,408 가
 1,859 . 2003 3,433 , 3,365
 , 1,577 .



1-3. 가

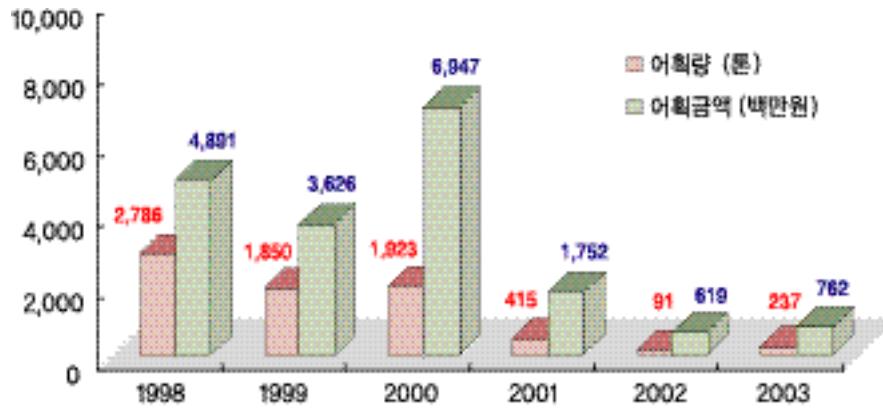
5, 42 가 가 . 가
 17 가 , 11 , 10 , 3 , 1
 가 1 1 , 가 .
 5 , 42 .



1-4. ()

. 1998 1,343 ,
 1999~2002 , 2003 4,509 .

26 , 1,829ha



1-5.

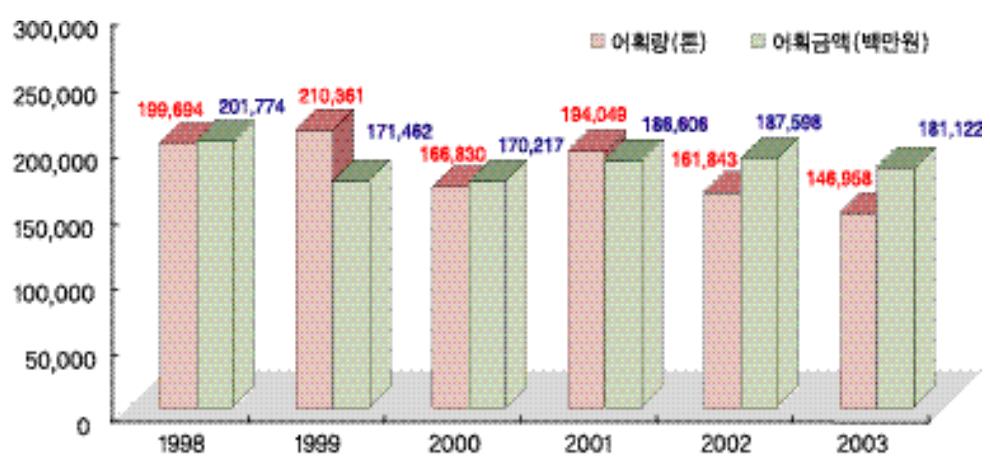
()

. 1998 2,786 가
 , 2002 91 가 , 2003 237

[2]

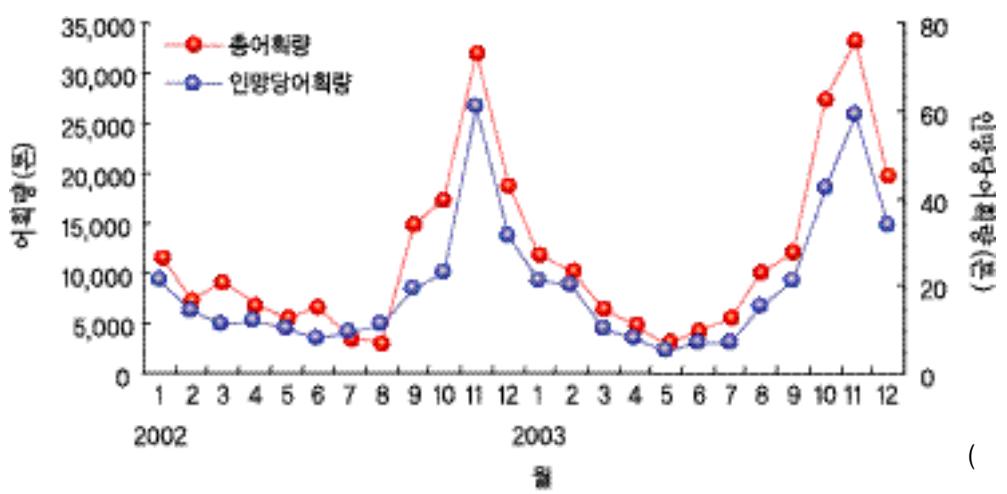
- 가.
- 1)
- 가)

(CPUE)



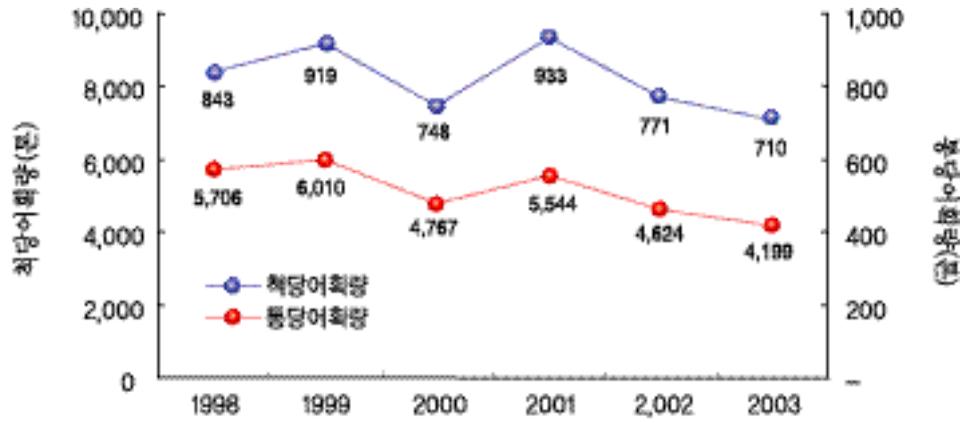
2-1.

1999 210,361 가
 , 2003 146,958 가



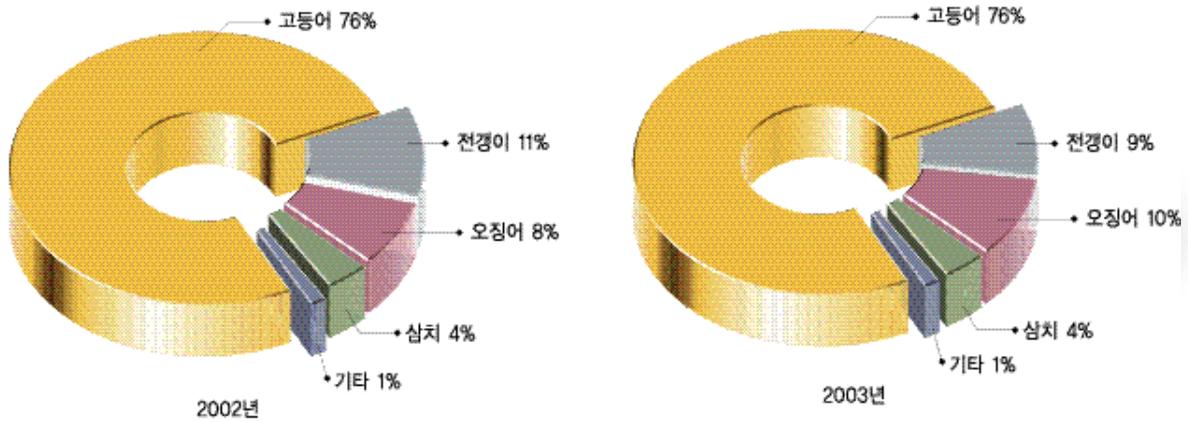
2-2.

CPUE () . 2002 19
 , 2003 20 가 . , 2002 2003 11 가
 , 가



2-3.

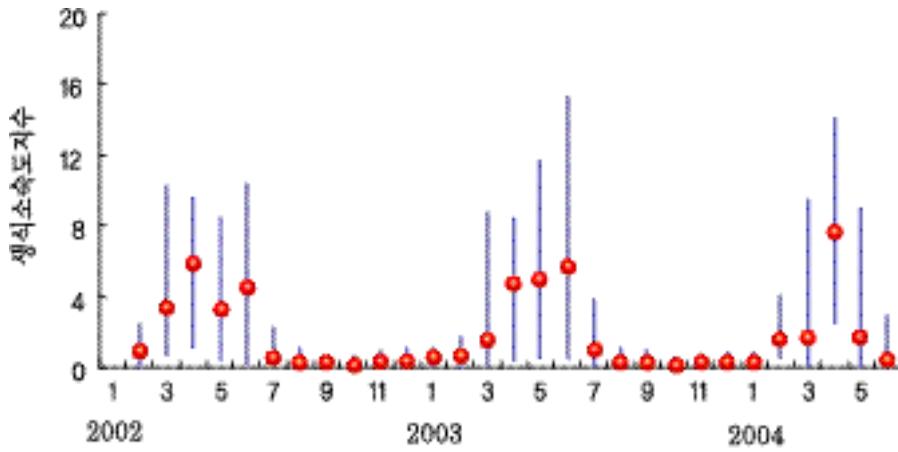
CPUE
 2001 가 , 2003 가



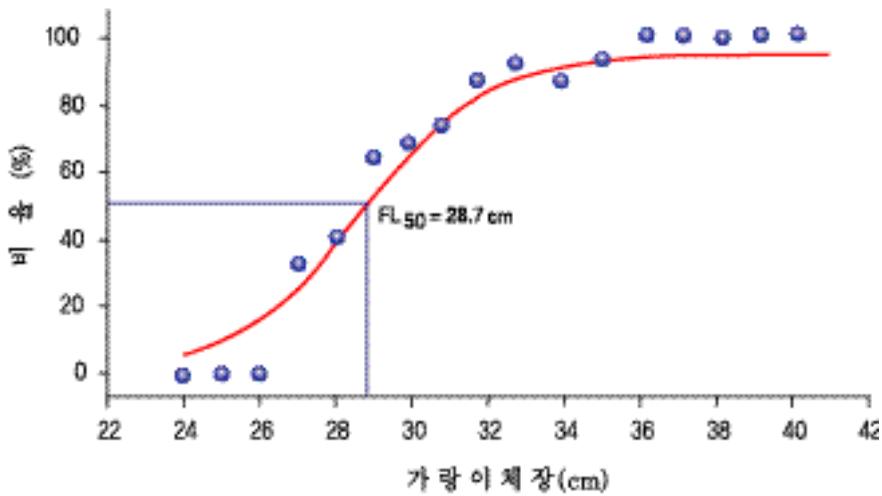
2-4.

, 2002
 2003 가 . , , , ,
 2003

3~6 4~5
 570,184 (FL 38.8cm), 112,447 (FL 30.1cm) 50%
 가 (Fork Length) 28.7cm , 2.4

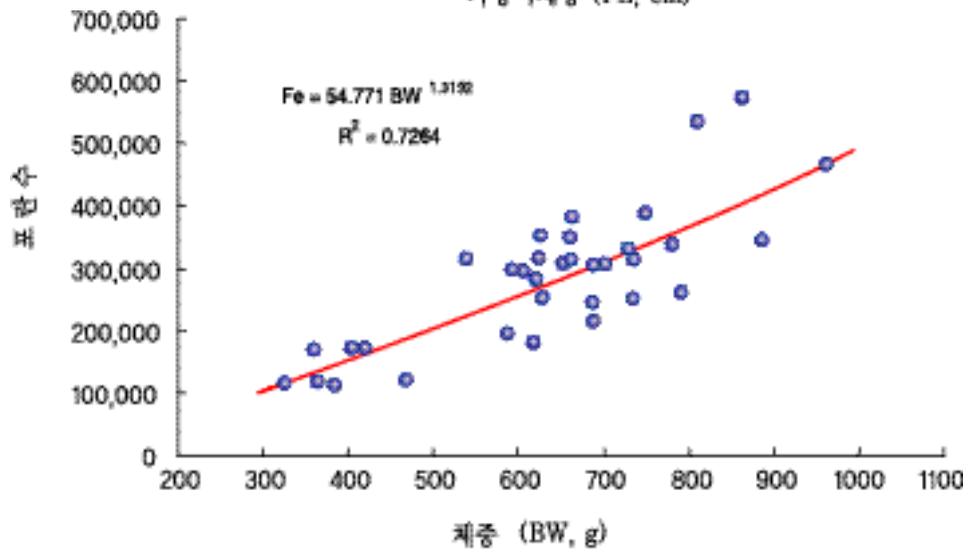
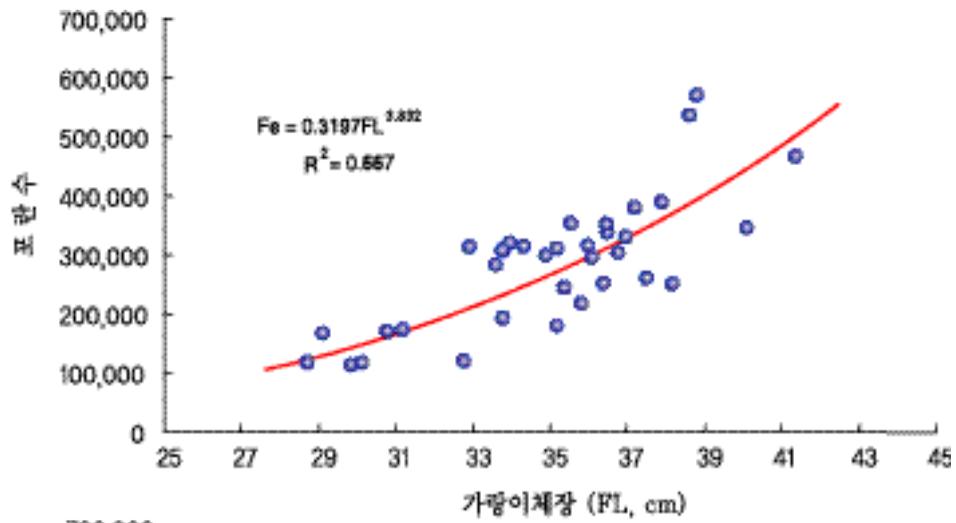


2-5.

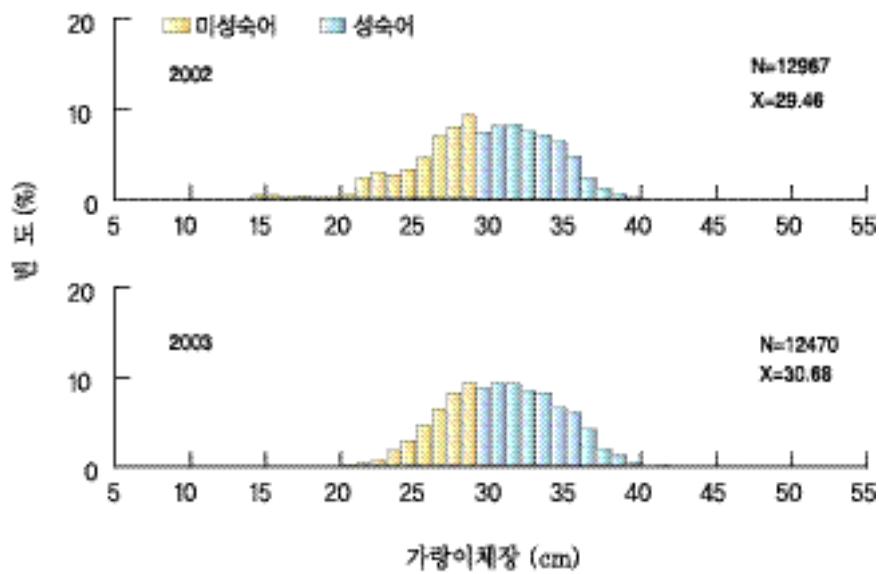


2-6.

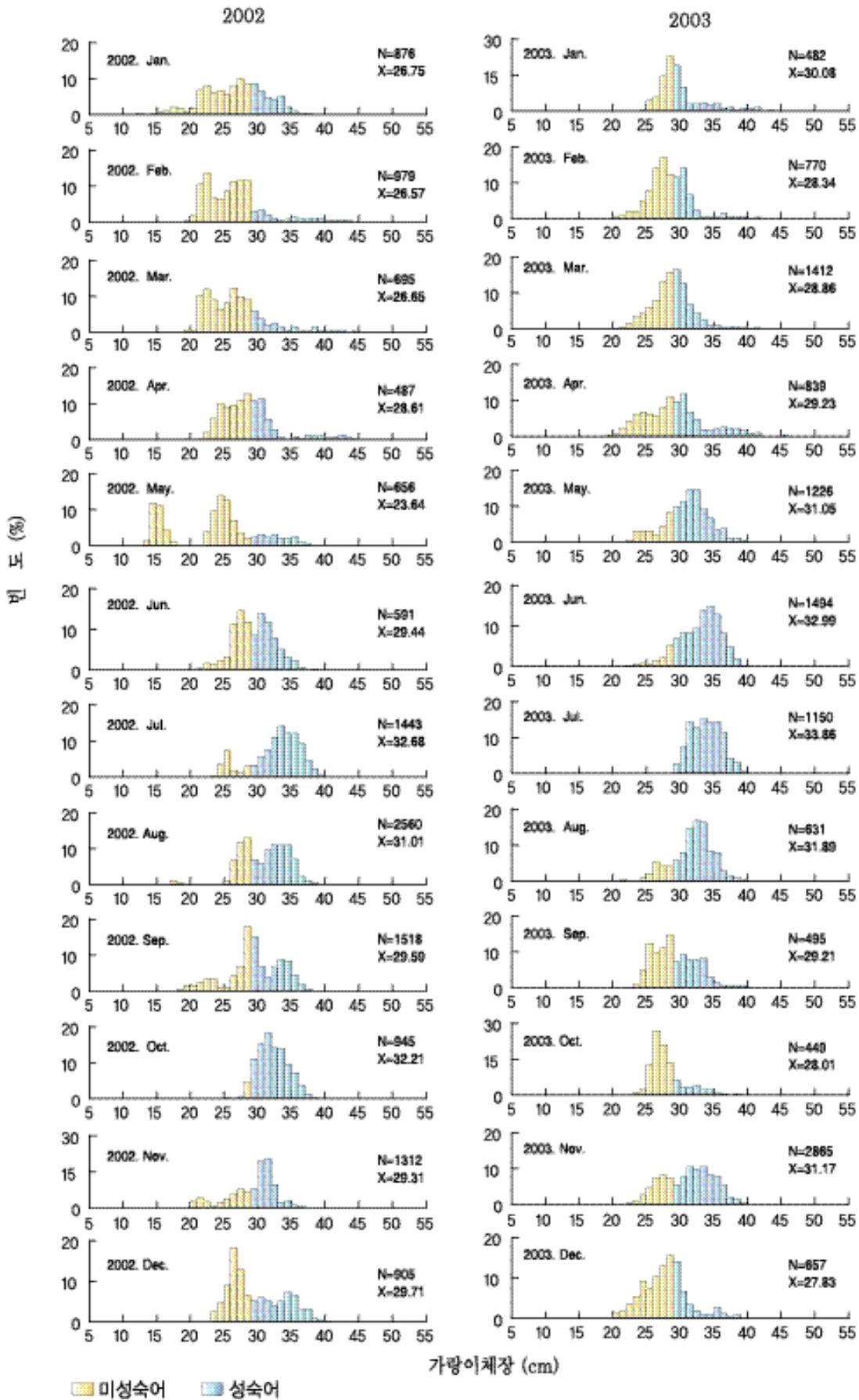
2002 (가) 29.46cm (12,967)
 , 2003 30.68cm (12,470) . 2002
 (가 28.7cm) 5,815 44.8% , 2003
 4,403 35.3% . 2002 2 5
 82.23%, 81.25% , 2003 10 12 77.28%,
 66.97% .



2-7.

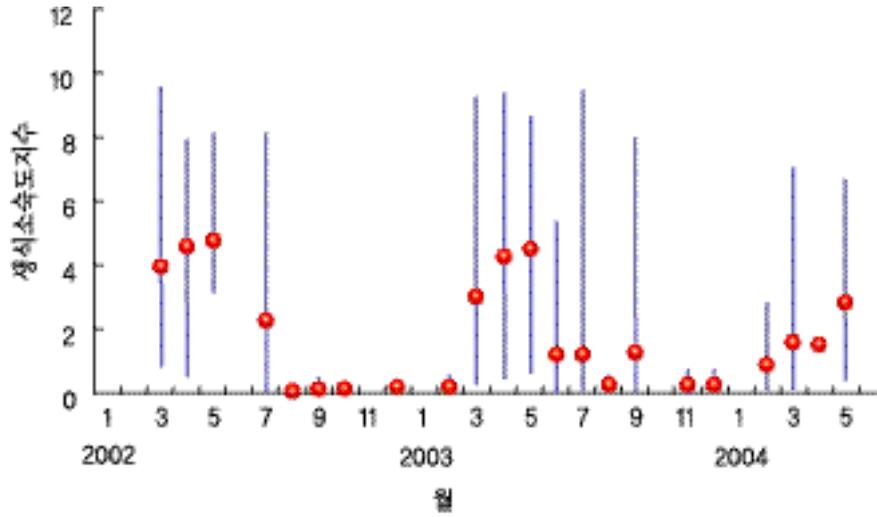


2-8.

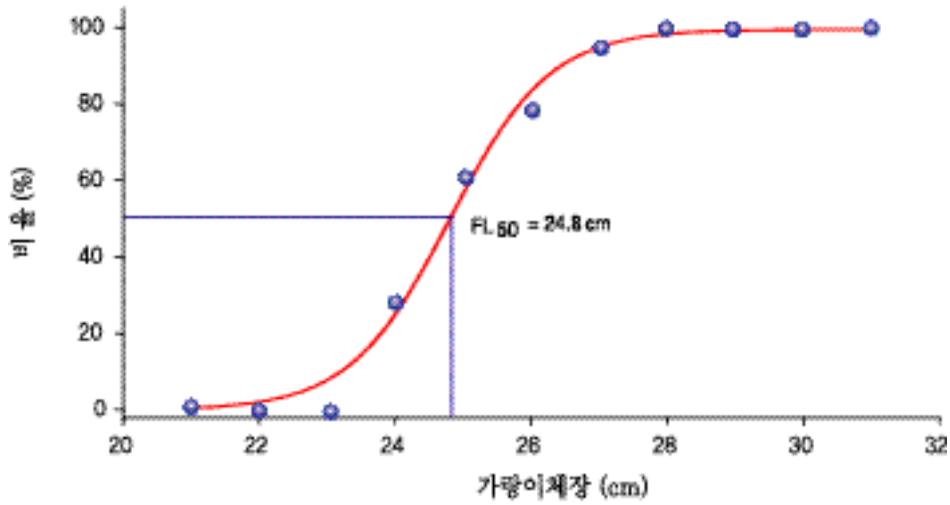


2-9.

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

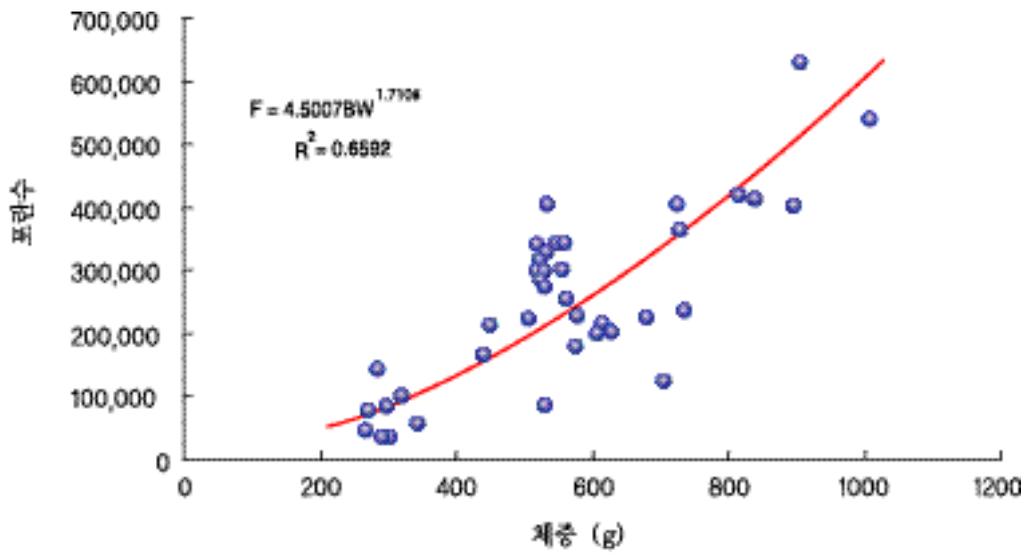
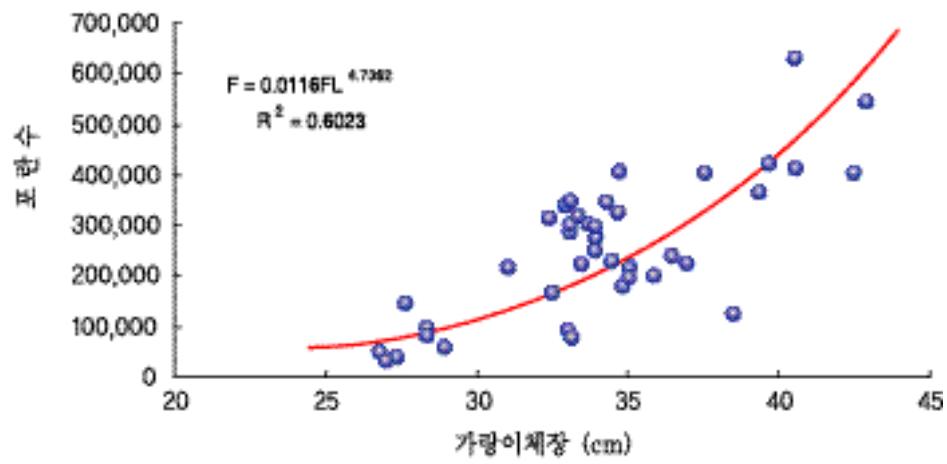


2-10.

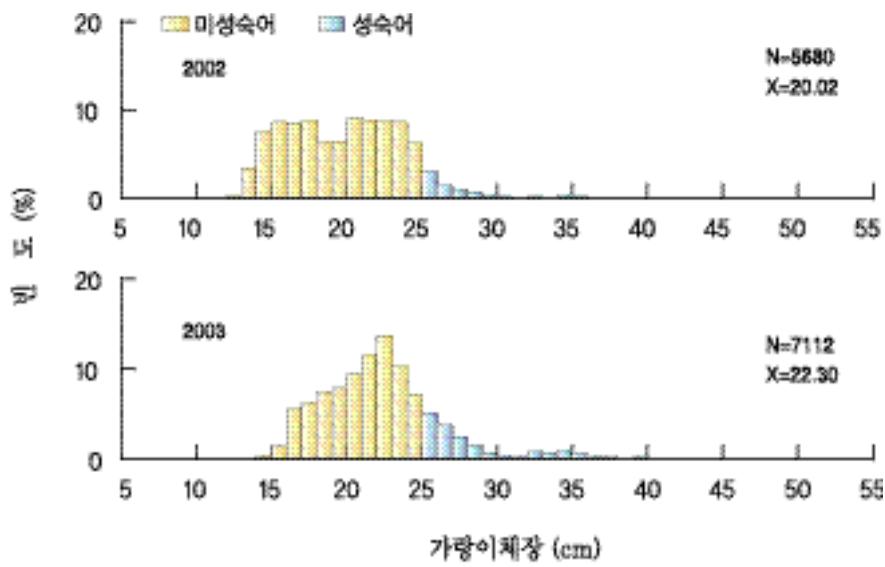


2-11.

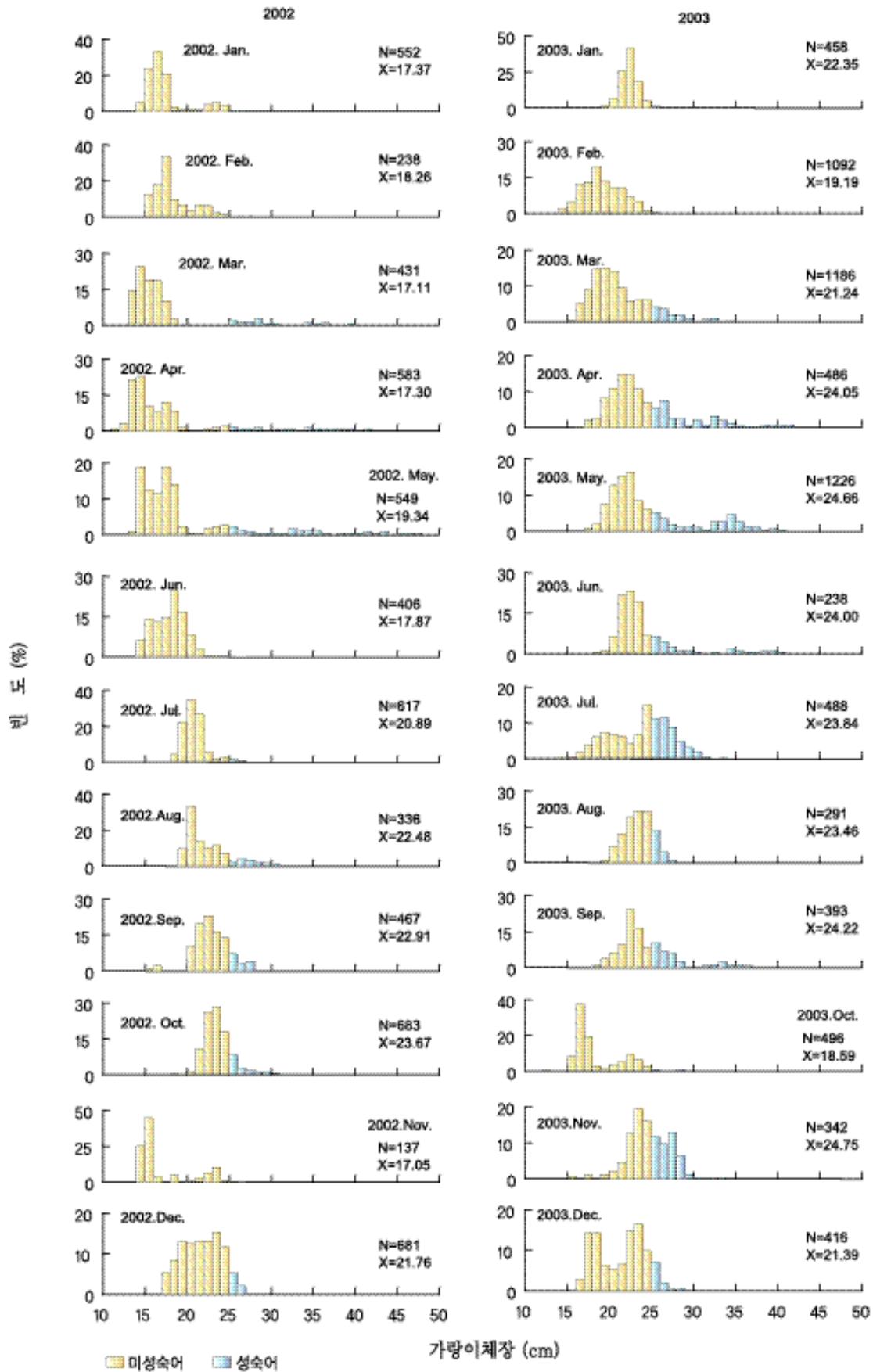
2002 가 20.02cm (5,680) ,
 2003 22.30cm (7,112) .
 5,197 91.4% , 2003 5,775 81.2%
 , 2002 2003



2-12.

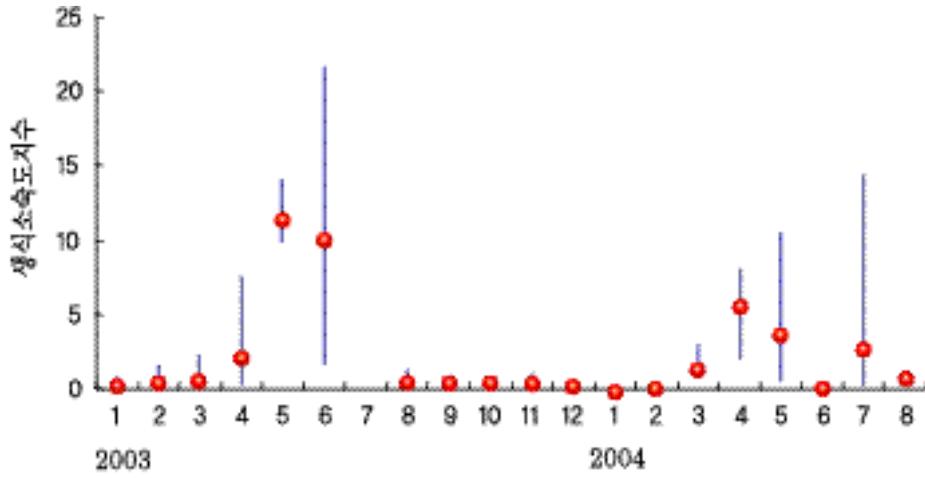


2-13.

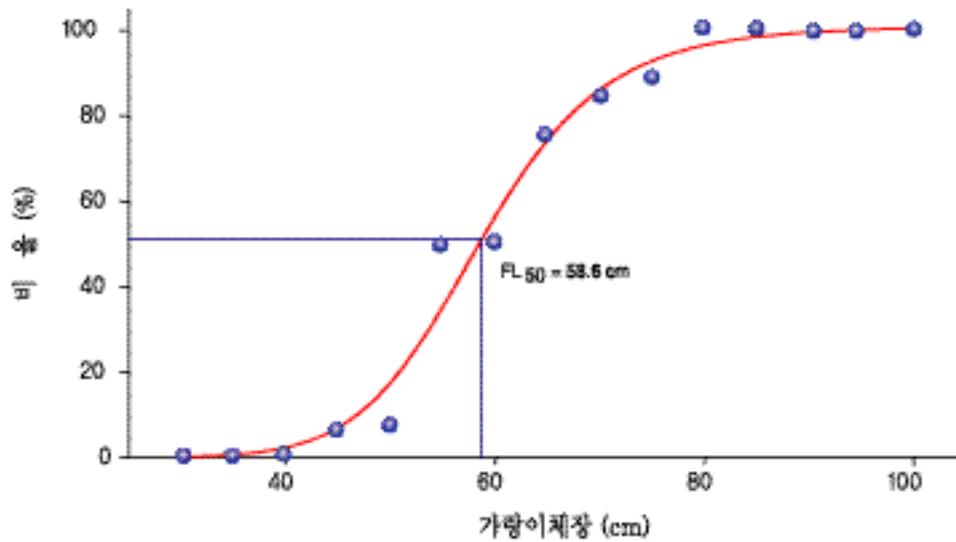


2-14.

가 4~7 (Fork Length) 58.6cm 5~6 50%

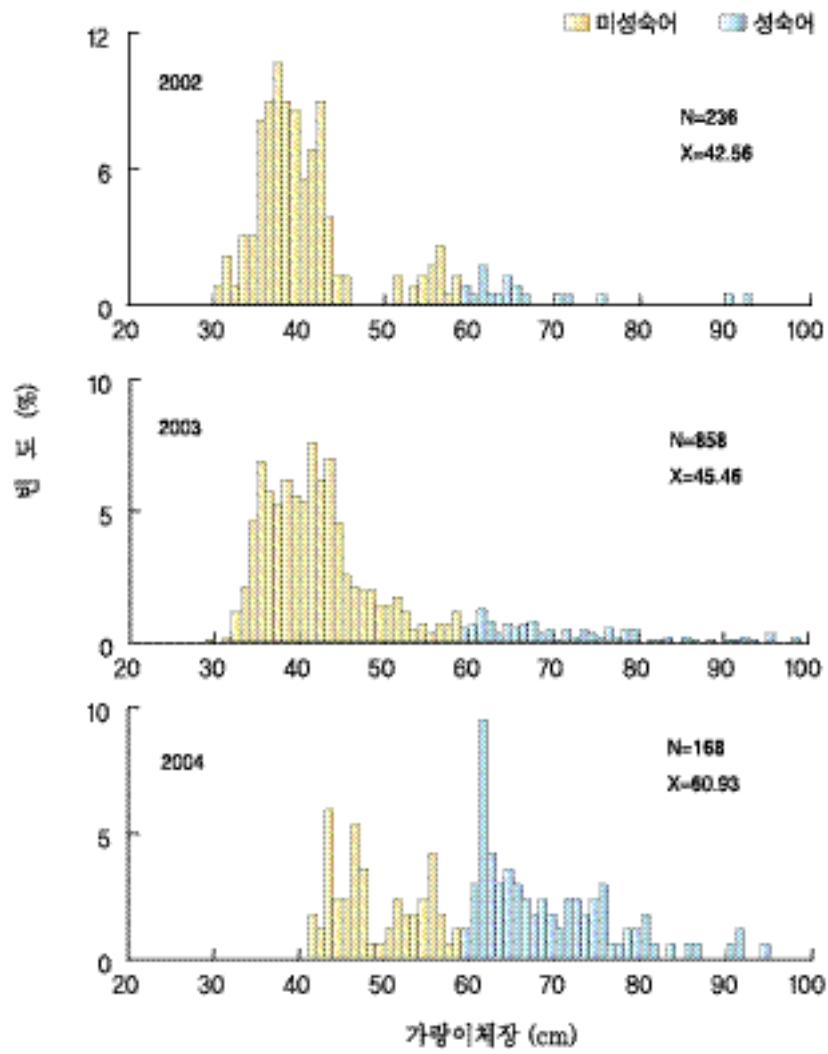


2-15.

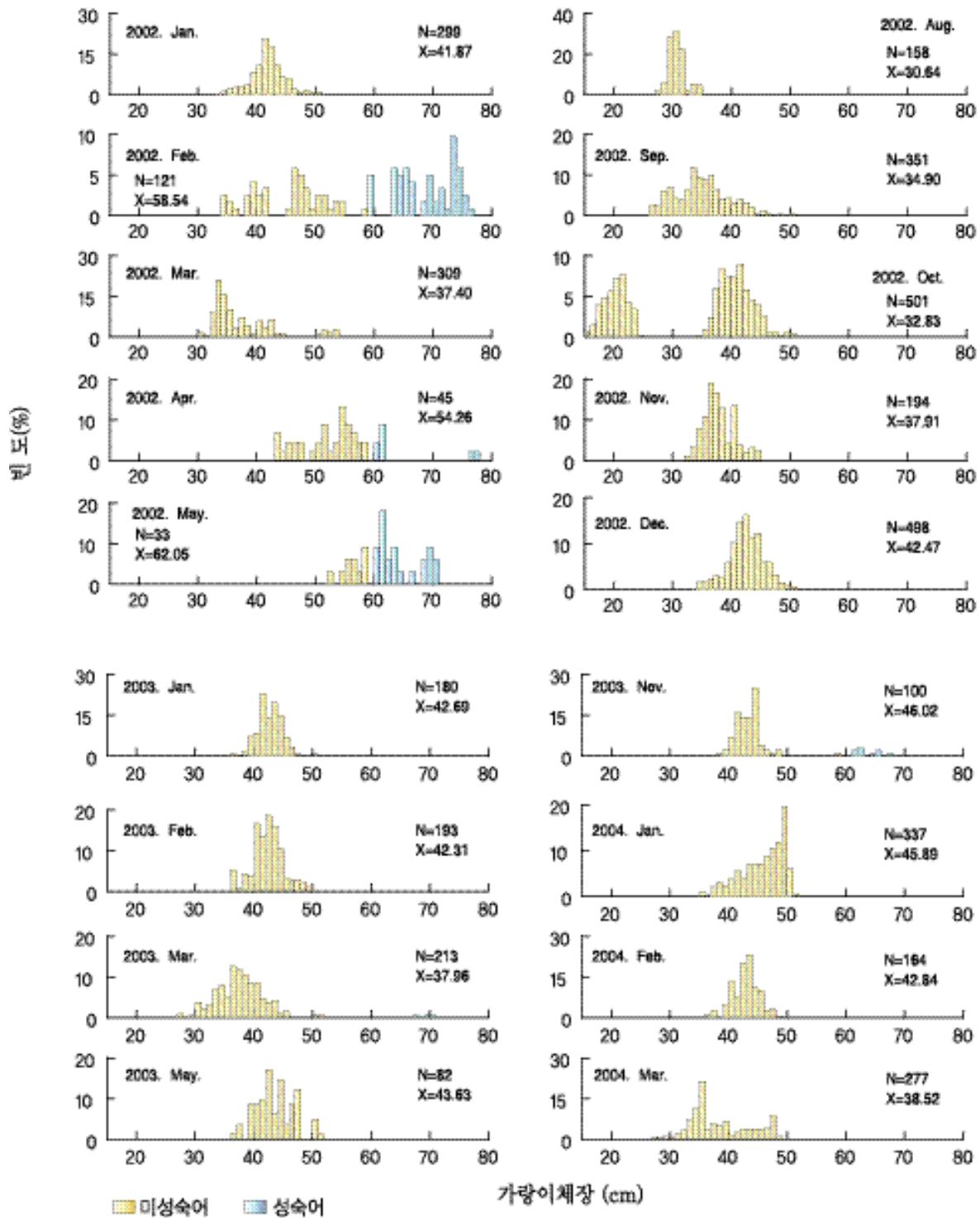


2-16.

2002 가 39.25cm (2,745), 2003
 43.74cm (1,626) , 2004 45.82cm (953)
 2002 2,608 95%
 , 2003 1,496 92% , 2004 848 89%
 2002 , 2003 , 2004

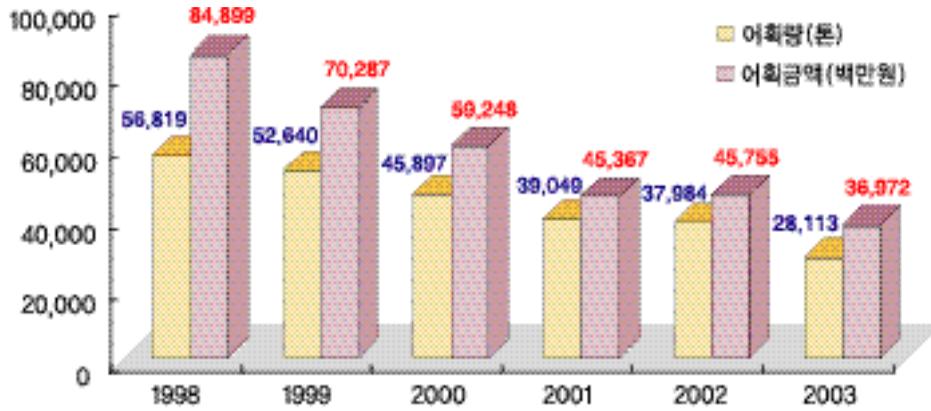


2-17.



2-18.

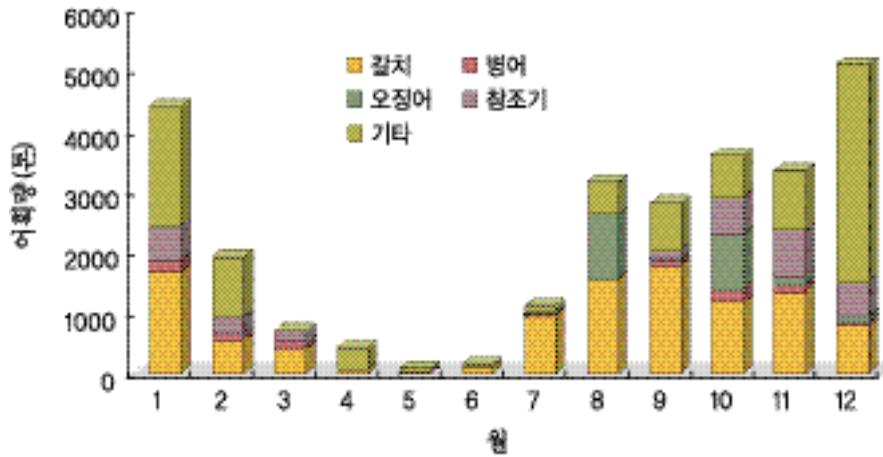
)



2-19.

()

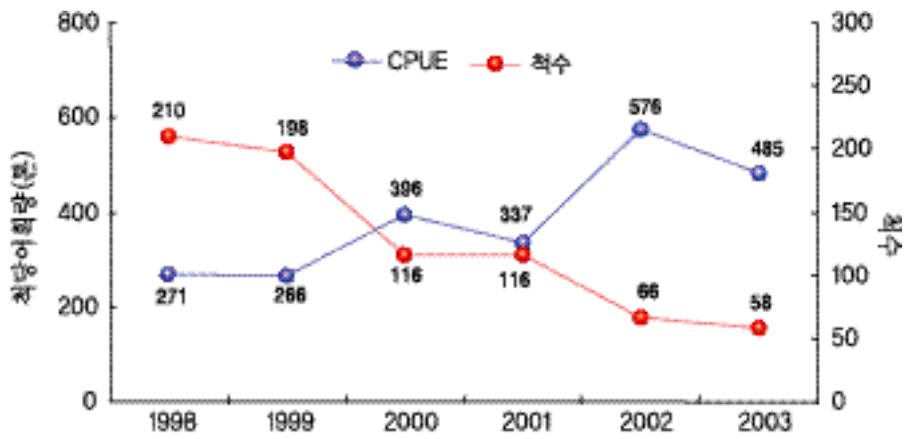
() 1998 56,819 1999 52,640
 , 2000 45,897 , 2001 39,049 , 2002 37,984 , 2003 28,113



2-20.

()

12 5,081 가 , 5 80 가



2-21.

() CPUE ()

1998 210

2003

58

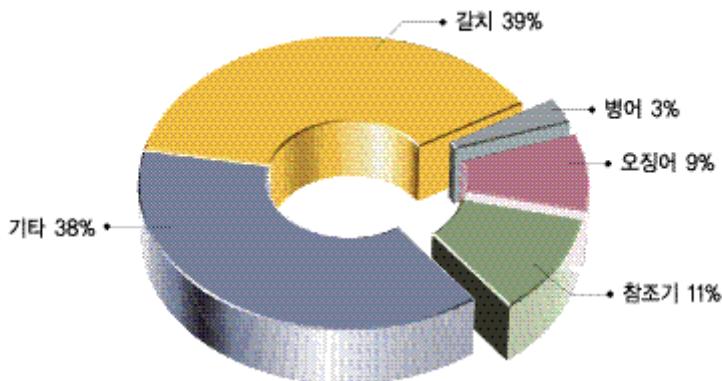
. CPUE

1998 271

2002 576

, 2003 485

가



2-22.

()

가 39%,

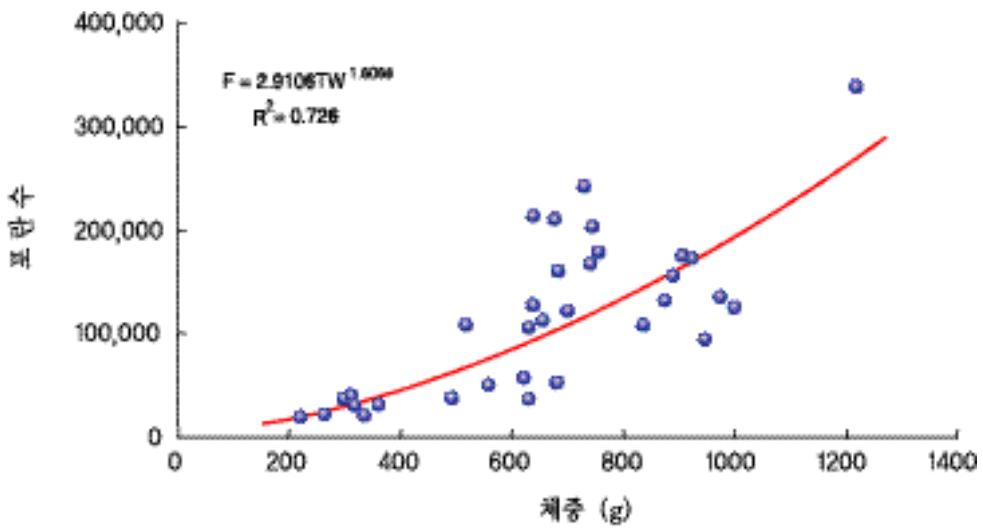
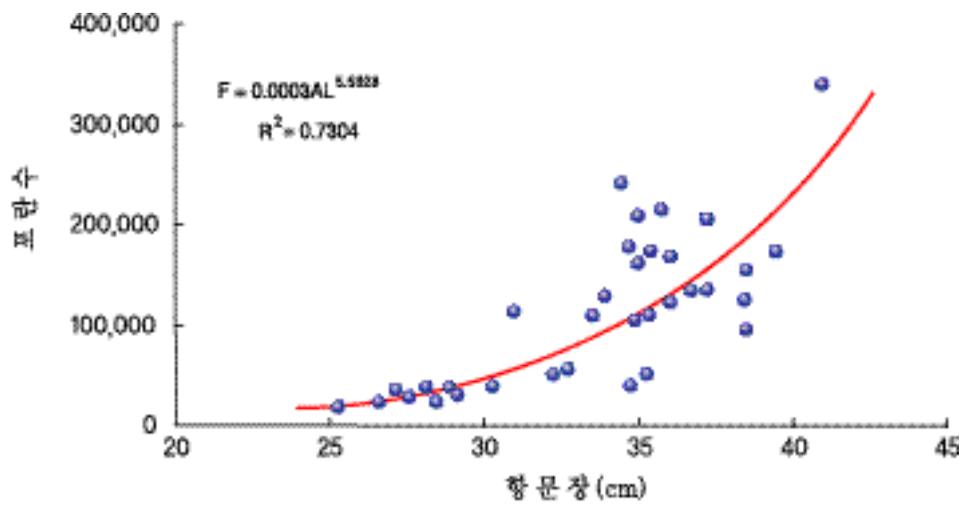
11%,

9%,

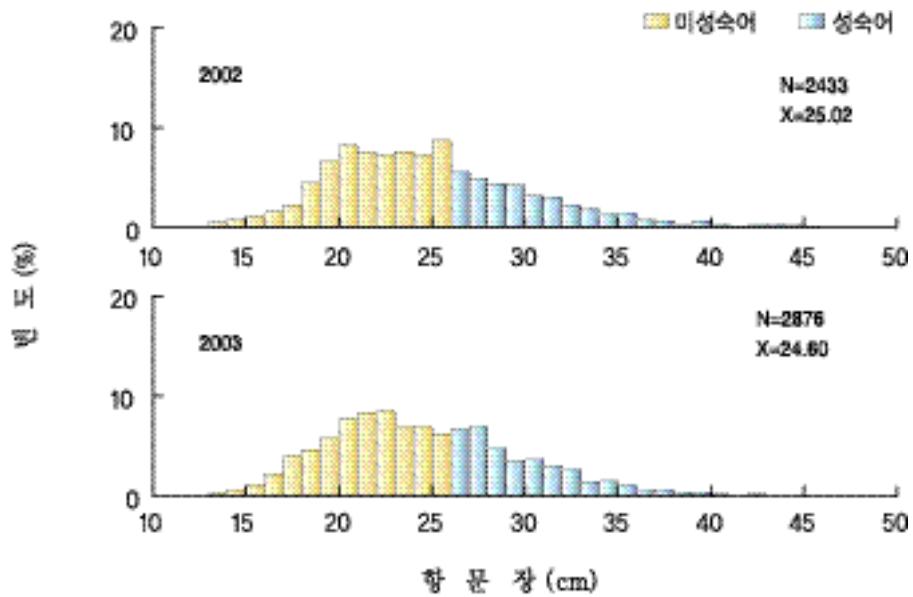
3%

()

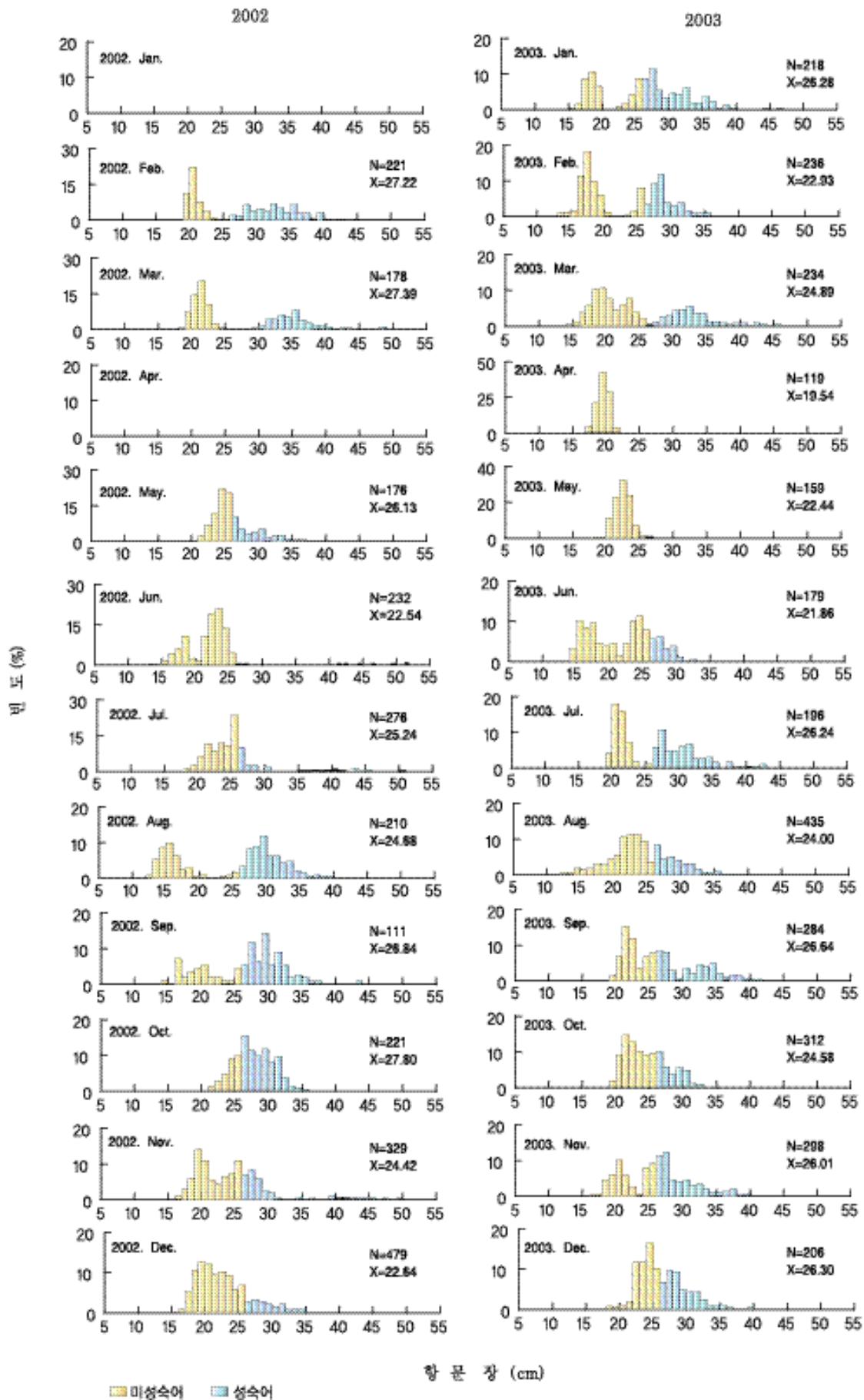
()



2-25.

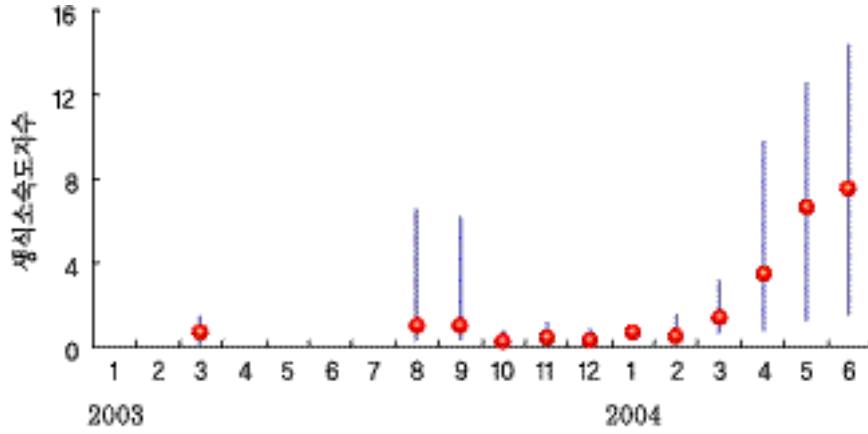


2-26.

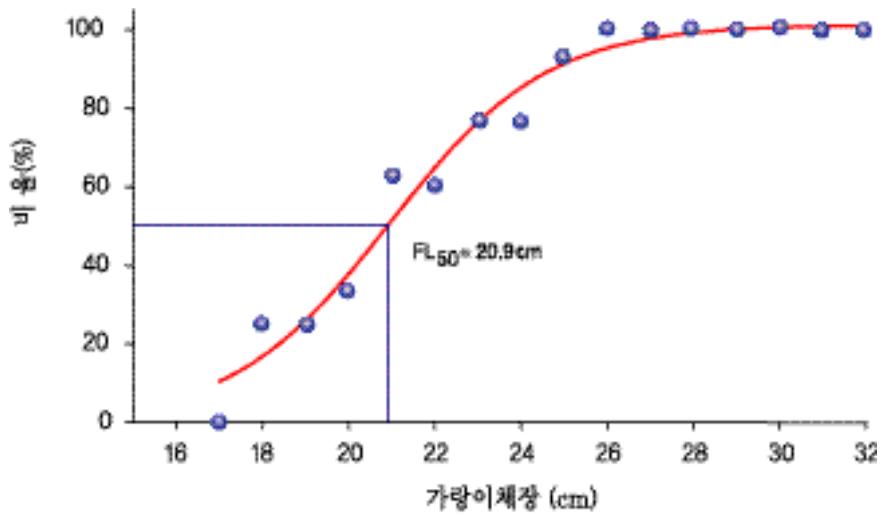


2-27.

가 4~9 (Fork Length) 20.9cm, 5~6, 2.3, 50%

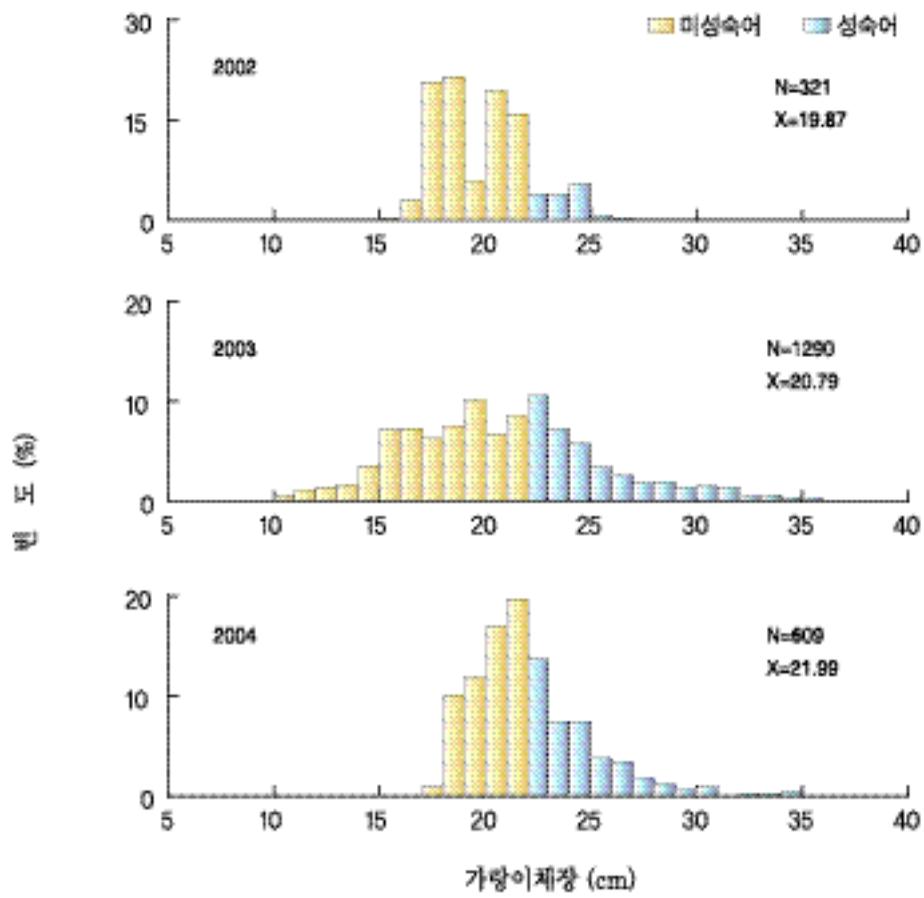


2-28.

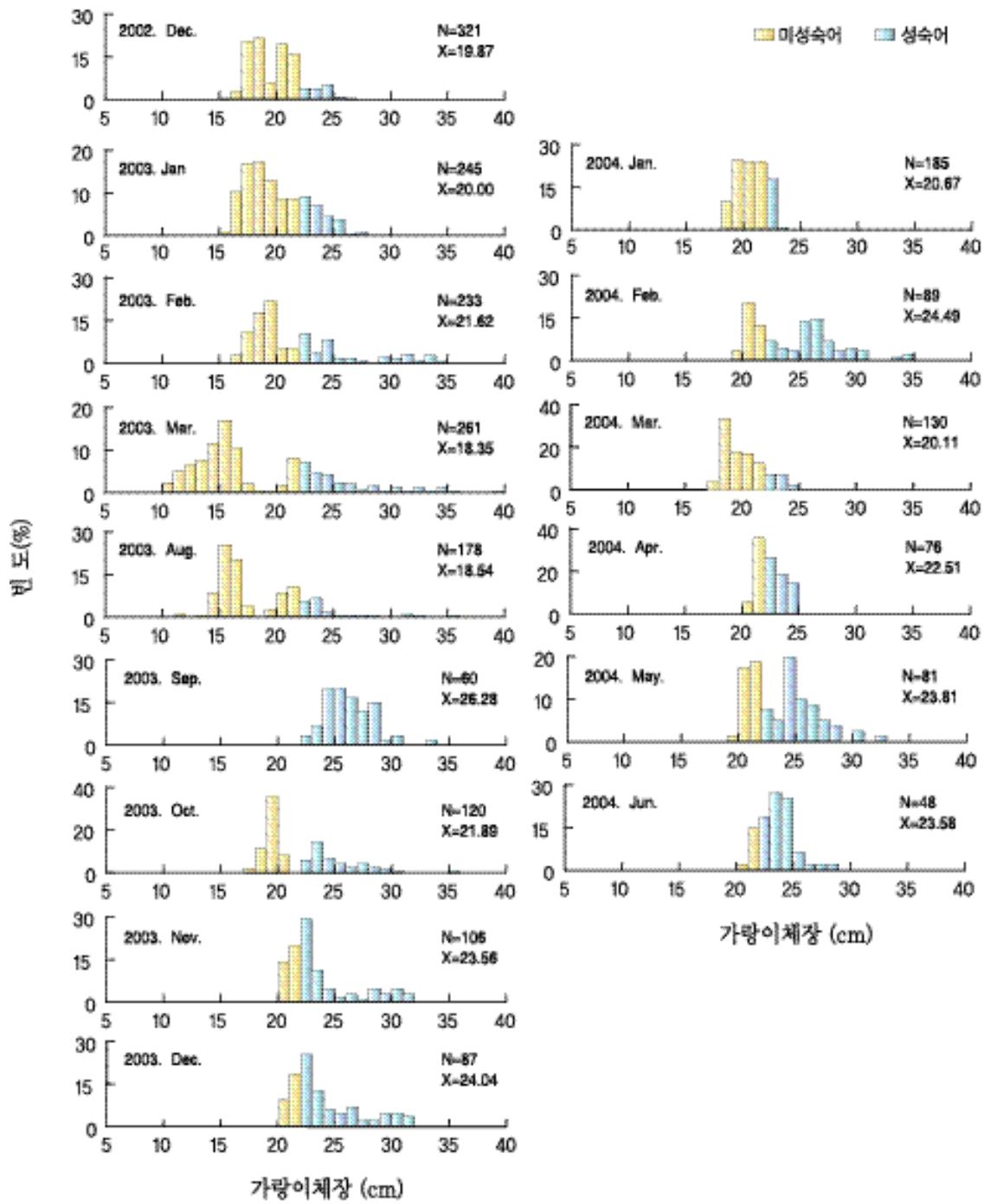


2-29.

2002 가 19.87cm (321), 2003
 20.79cm (1,290) , 2004 6 21.99cm (609)
 가 2002 277 86.3% , 2003 792
 61.4% , 2004 6 361 59.3%
 2003 9 , 2002 12 2003 3 63%
 , 2004 2 ~6 61.6~80.5%



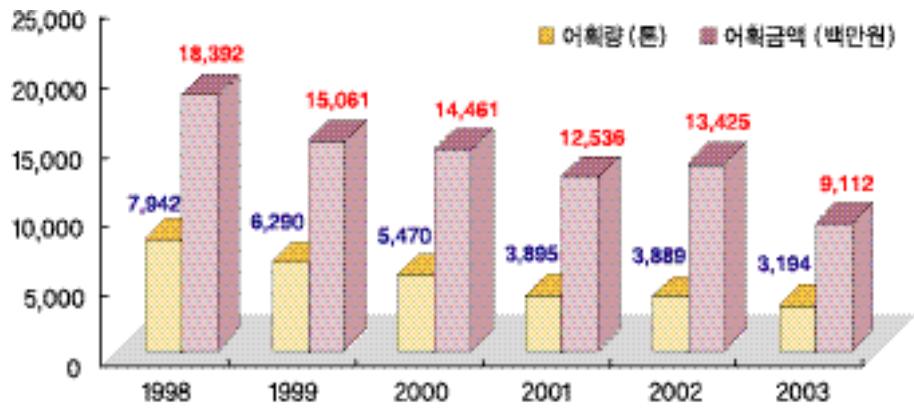
2-30.



2-31.

()
 , CPUE () 가
 가

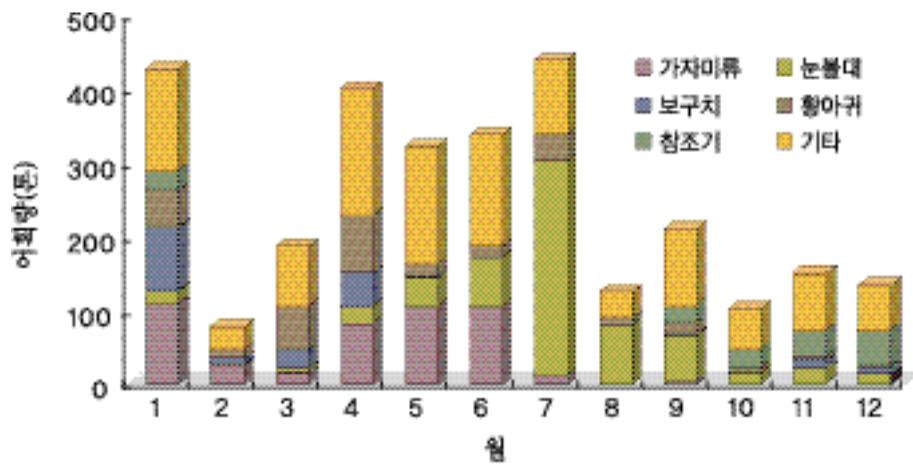
)



2-32.

()

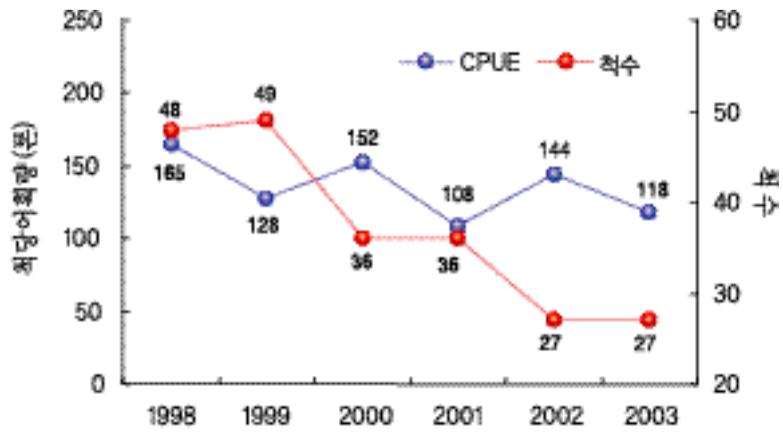
() 1998 7,942 1999 6,290
 , 2000 5,470 , 2001 3,895 , 2002 3,889 , 2003 3,194



2-33.

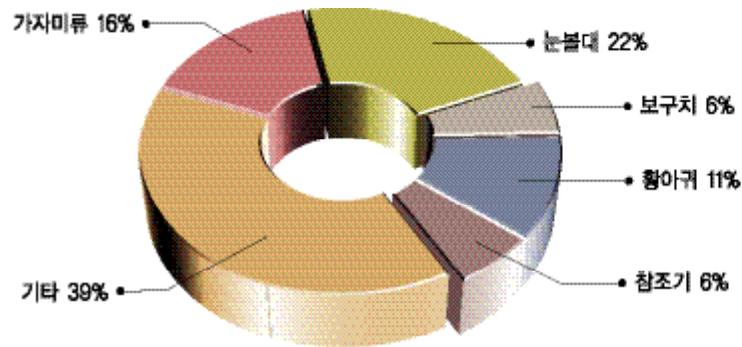
()

2003 7 , 1 , 4 438 , 425 , 401
 , 2 76 가 . 8 12 20



2-34.

() CPUE ()
 . 1998 48 2003
 27 . CPUE 1998 165 , 1999 128 , 2000 152 , 2001
 108 , 2002 144 , 2003 118



2-35.

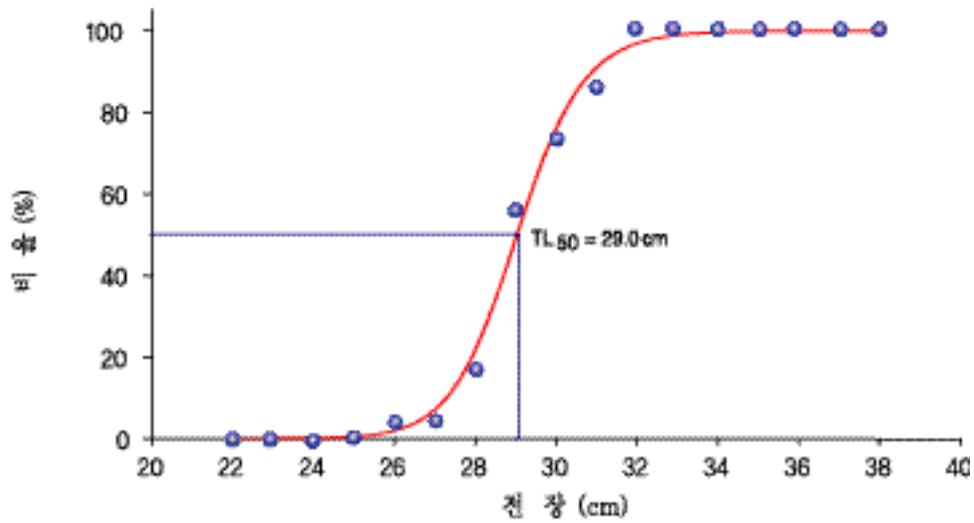
() 22%, 가
 16%, 11%, 6%, 6% , 가

() , 가 , ,

7 가 8 10

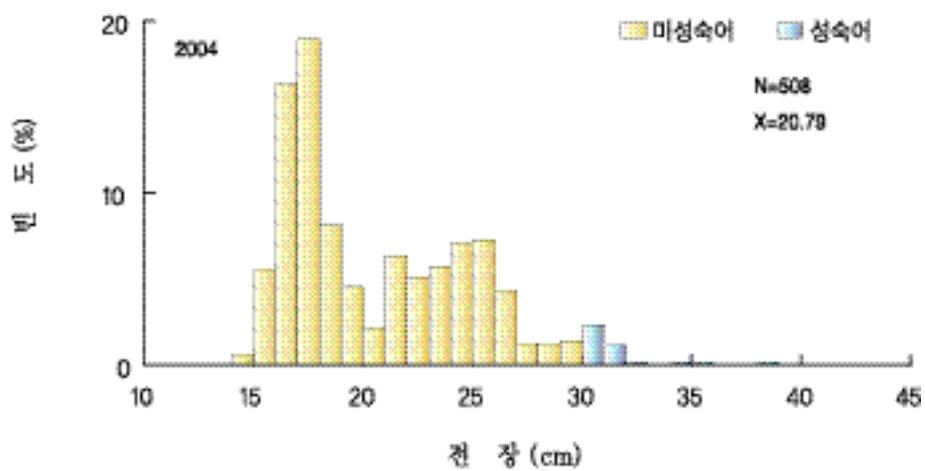
9~10 , 50%

(Total Length) 29.0cm

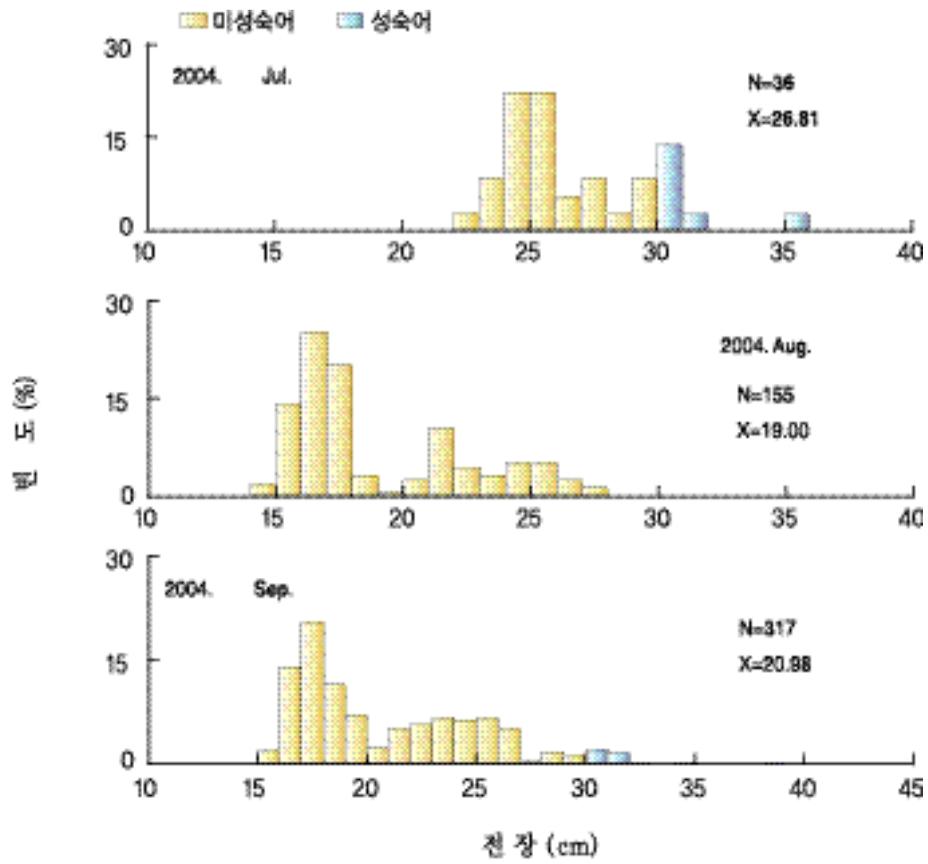


2-36.

2004 () 20.79cm (508)

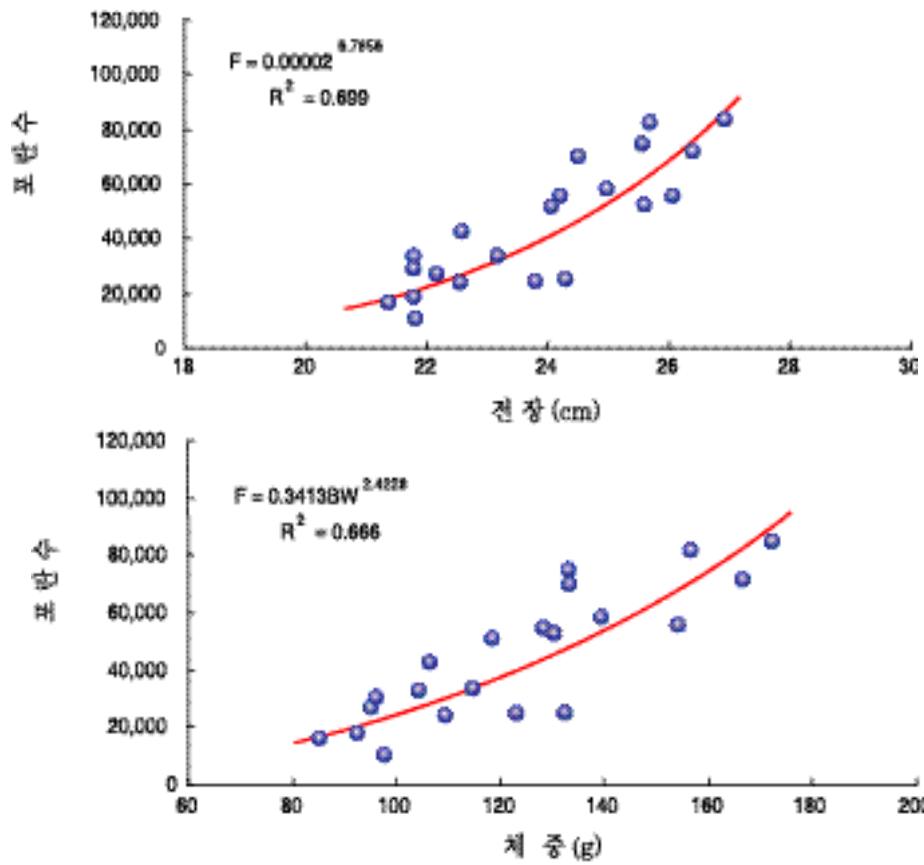


2-37.

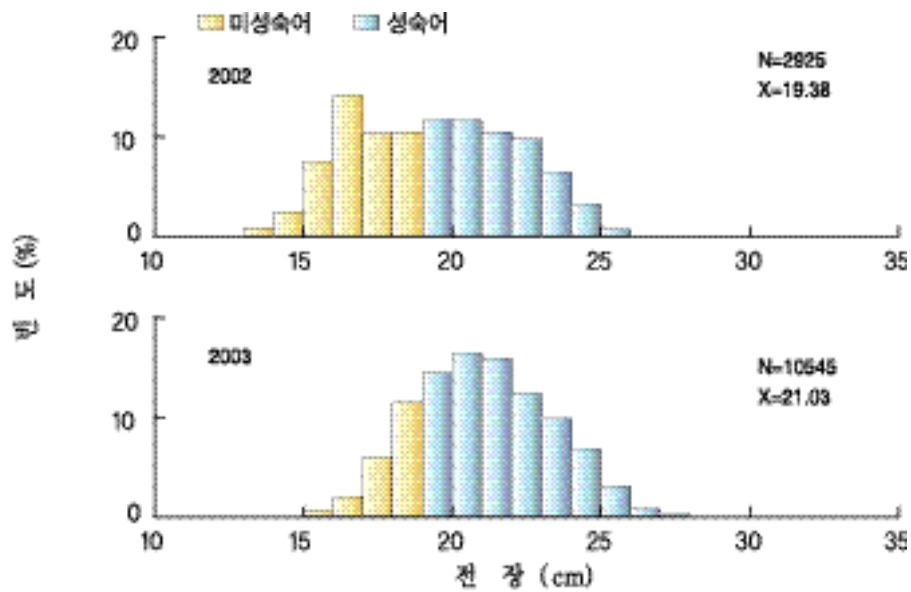


2-38.

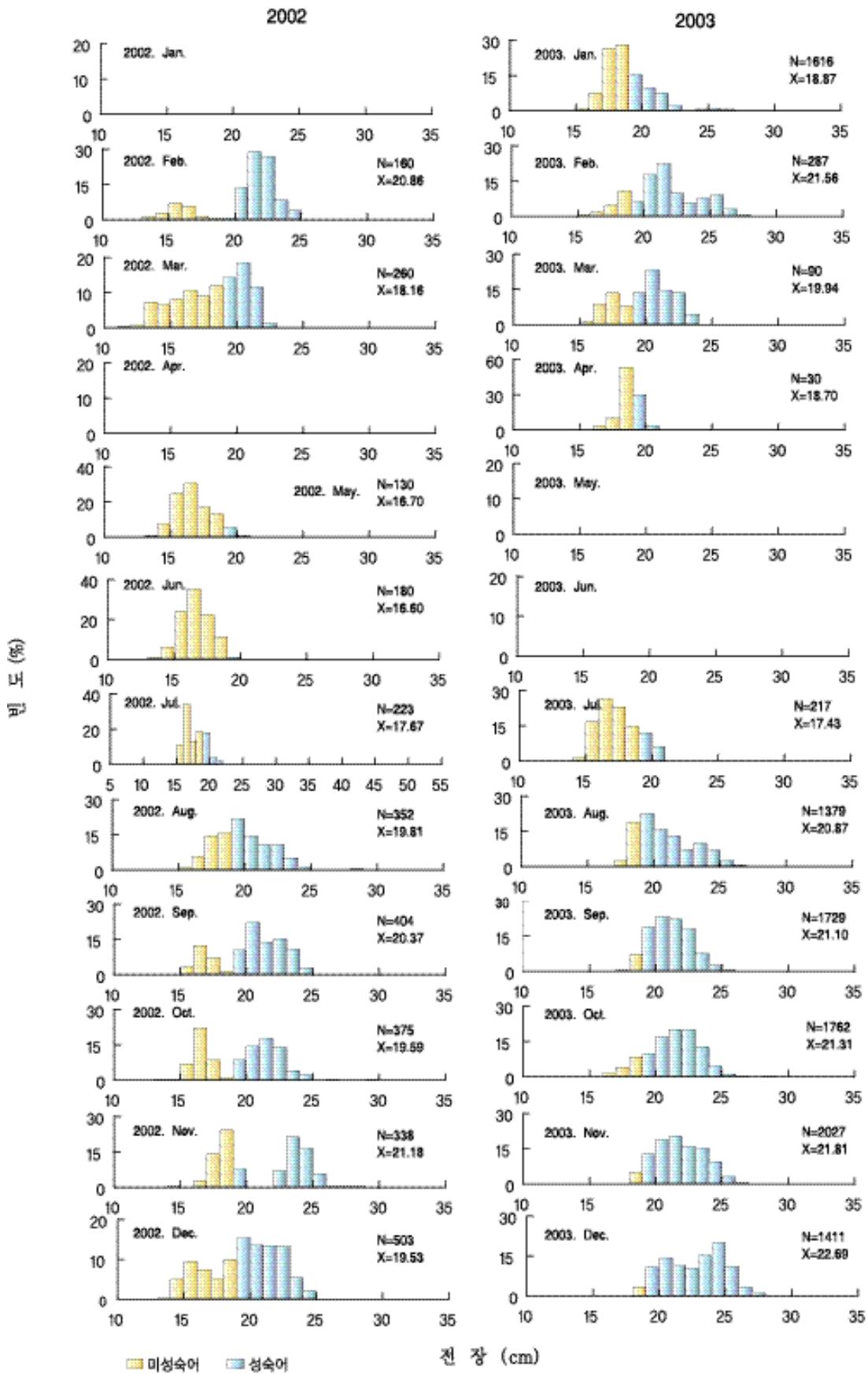
2004	452
89.0%	
7	26.81cm
20.98cm, 88.9%	가 78.8%, 8 19.0cm, 100%. 9



2-41.

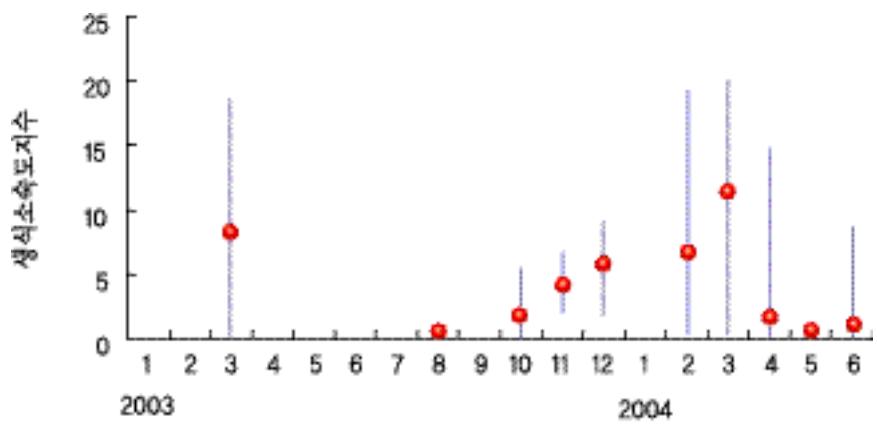


2-42.

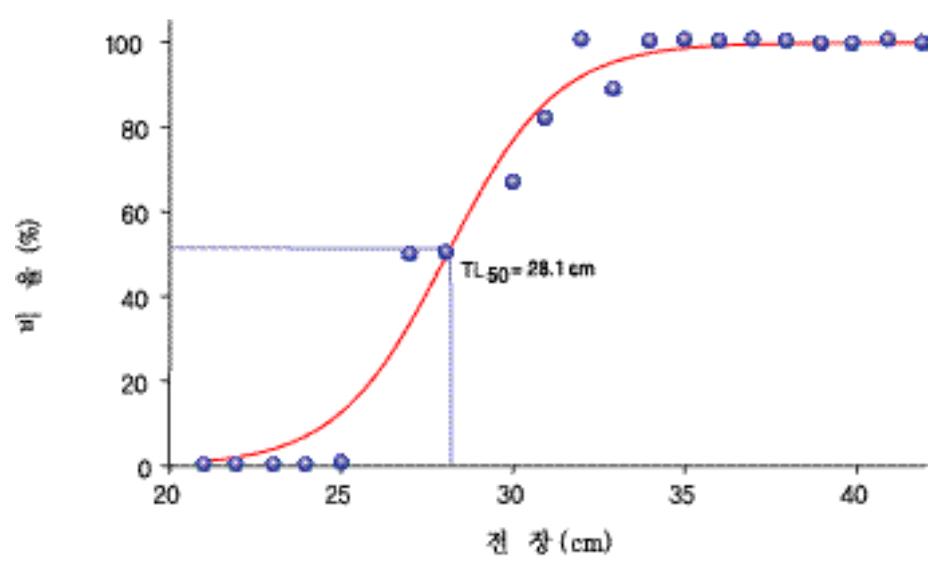


2-43.

가
 가 2~4 2~3 50%
 (Total Length) 28.1cm

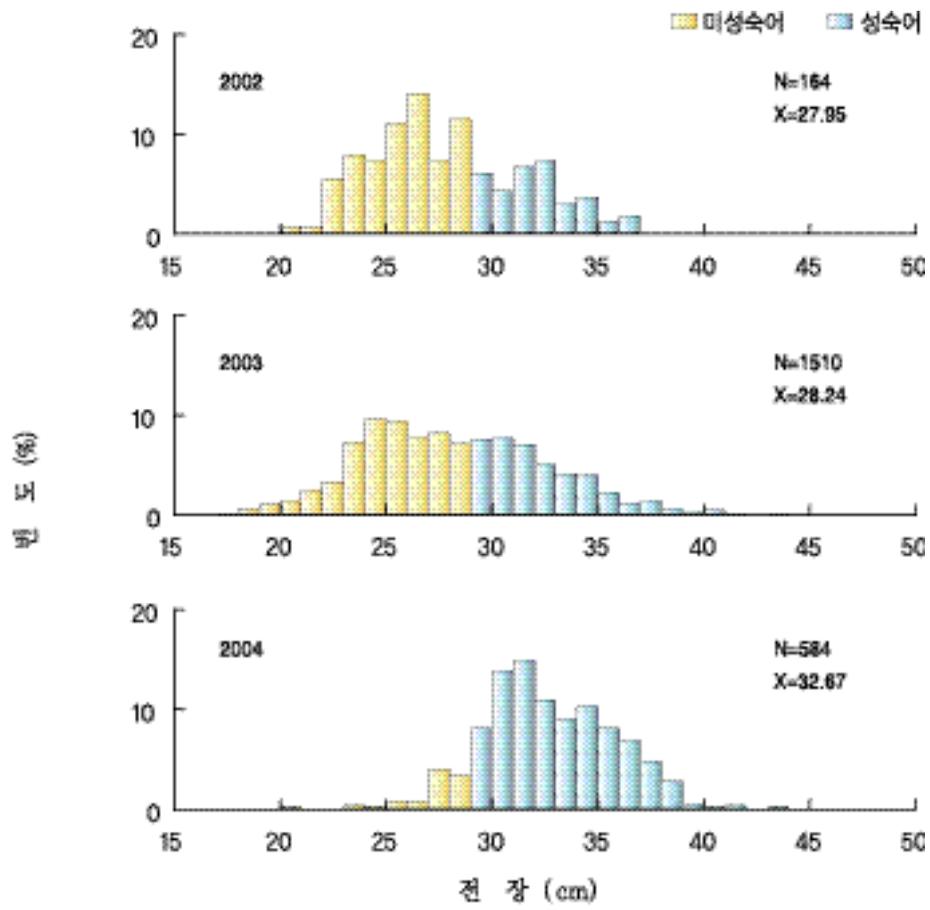


2-44. 가

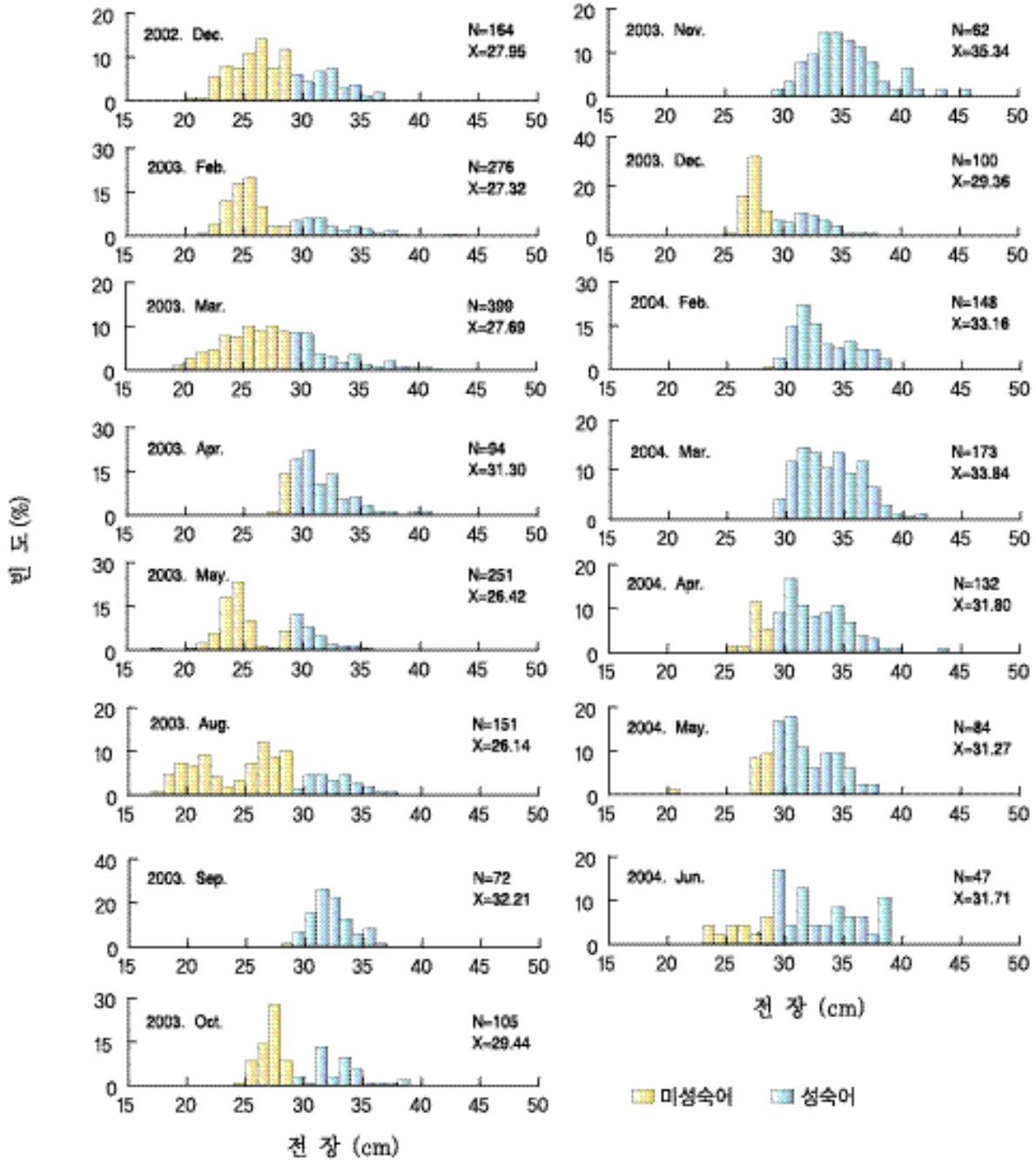


2-45. 가

가 2002 () 27.95cm (164), 2003
 28.24cm (1,510) , 2004 6 32.67cm (584)
 가 2002 108 65.9% , 2003 878 58.2%
 , 2004 6 54 9.25% , 2002 2
 ~6 61.6~80.5% , 2003 2 ~4
 30%

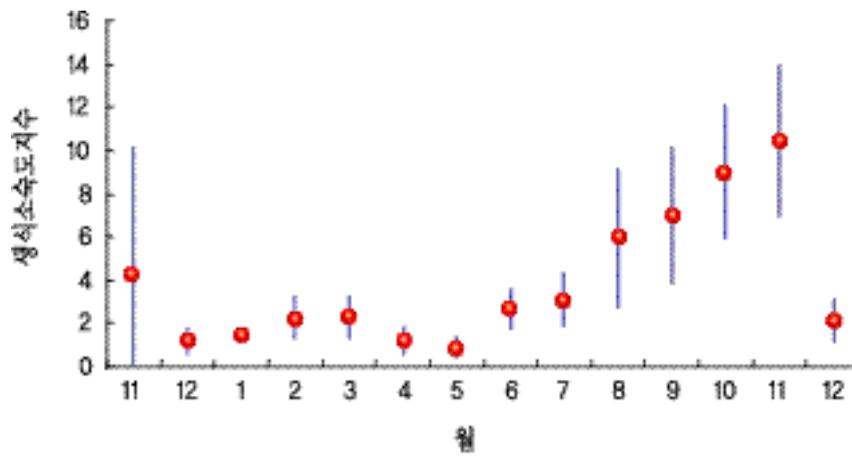


2-46. 가

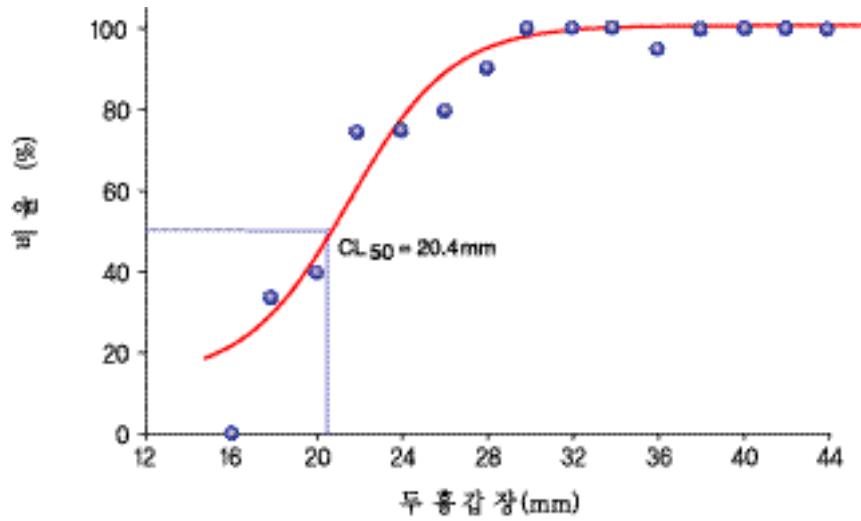


2-47. 가

9~11, 30mm, 95%, 50%, 8~11, 18mm, 30mm, 20.27 mm, 94,400~405,200, 8~11, 9~11, 1, 2

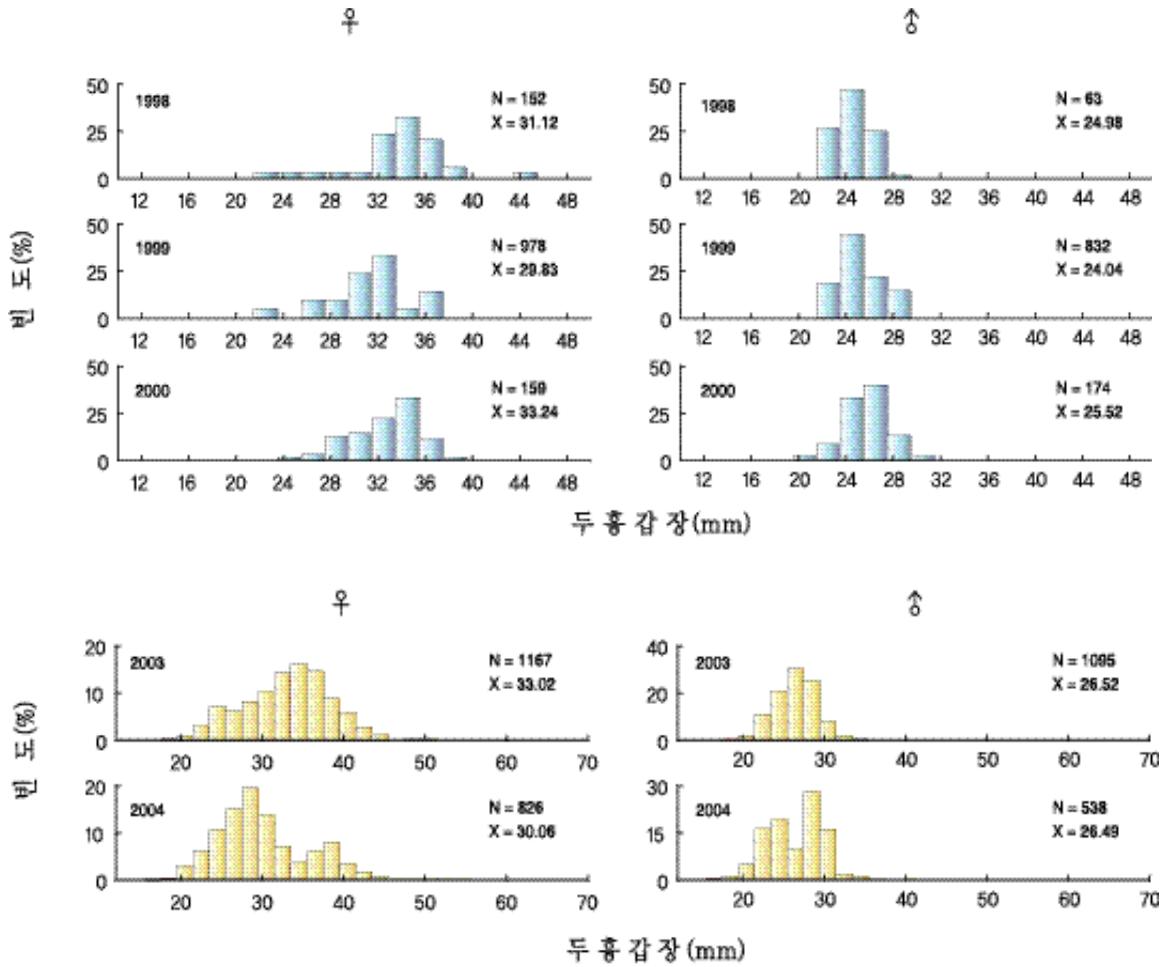


2-48.



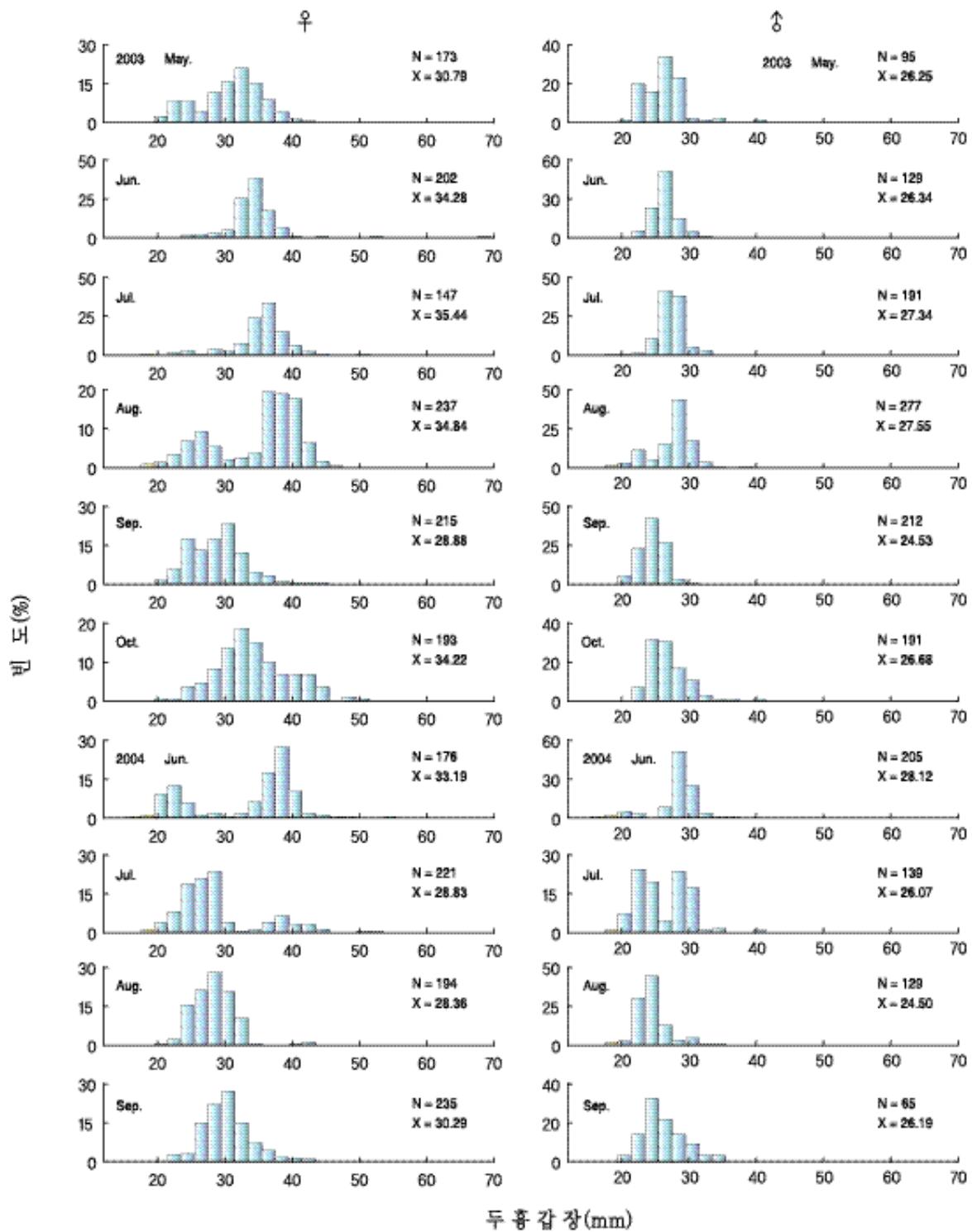
2-49.

2003 () 33.02mm (1,167)
 26.52mm (1,095) , 2004 30.06mm (826)
) 26.49mm (538) . 2003
 14 , 31 1.2%, 3.6% , 2004
 가 30 , 35 3.6%, 6.5% ,
 가



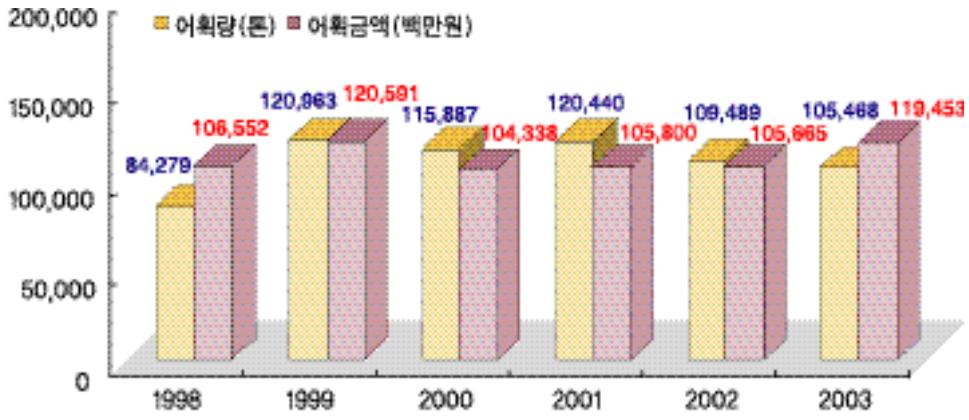
2-50.

()
 , CPUE ()



2-51.

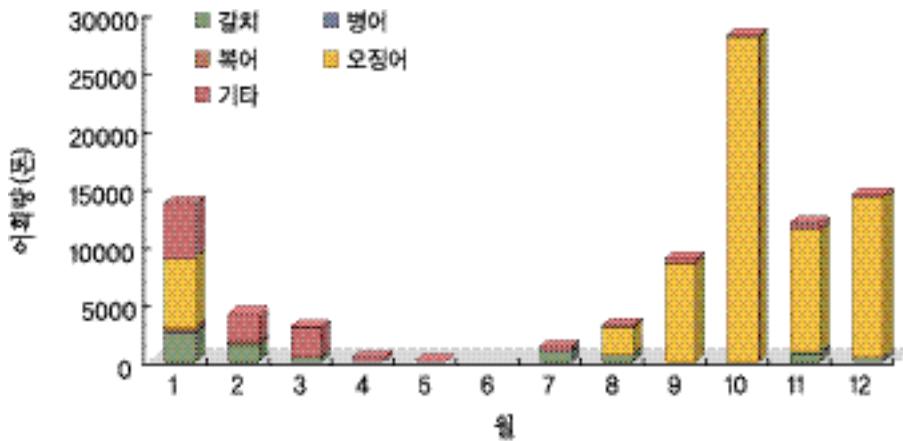
)



()

2-52.

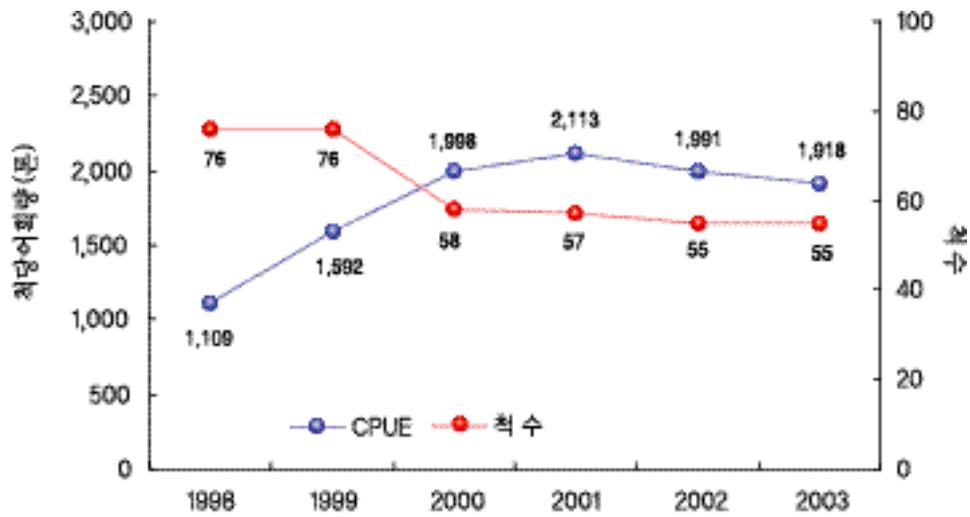
1998 84,279 가 , 1999 120,963 가 , 2003 105,468 가



()

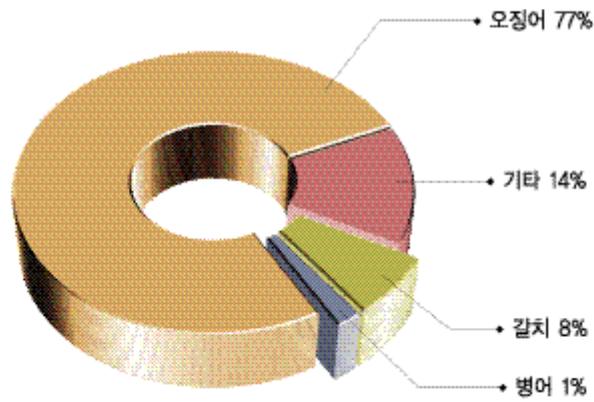
2-53.

2003 10 27,948 가 , 12 14,225
 , 1 13,552 , 11 11,822 , 4, 5, 7, 8
 , 6



2-54.

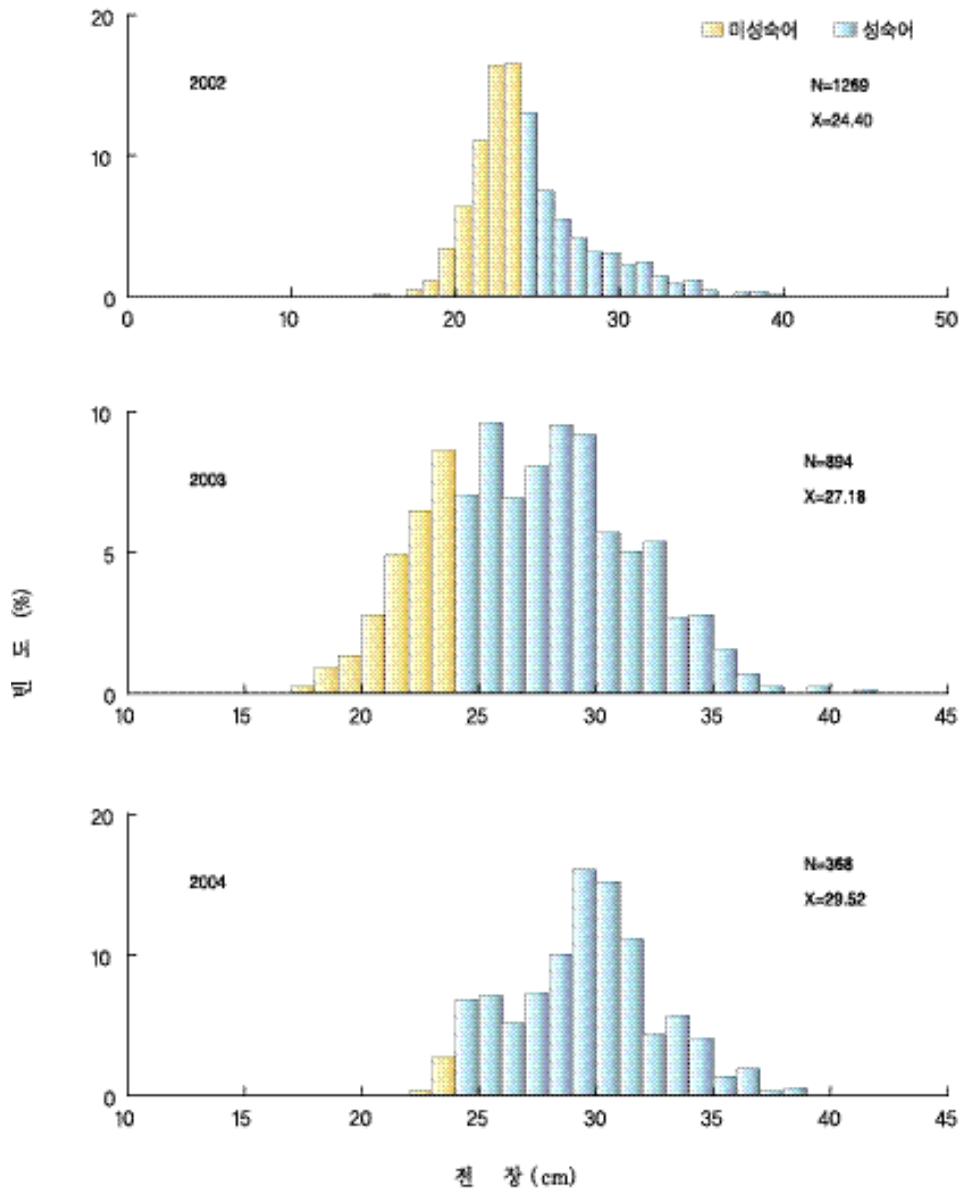
CPUE ()
 1998 76 2003 55
 CPUE 1998 1,109 2001 2,113 가 , 2002
 2003 1,991 , 1,918



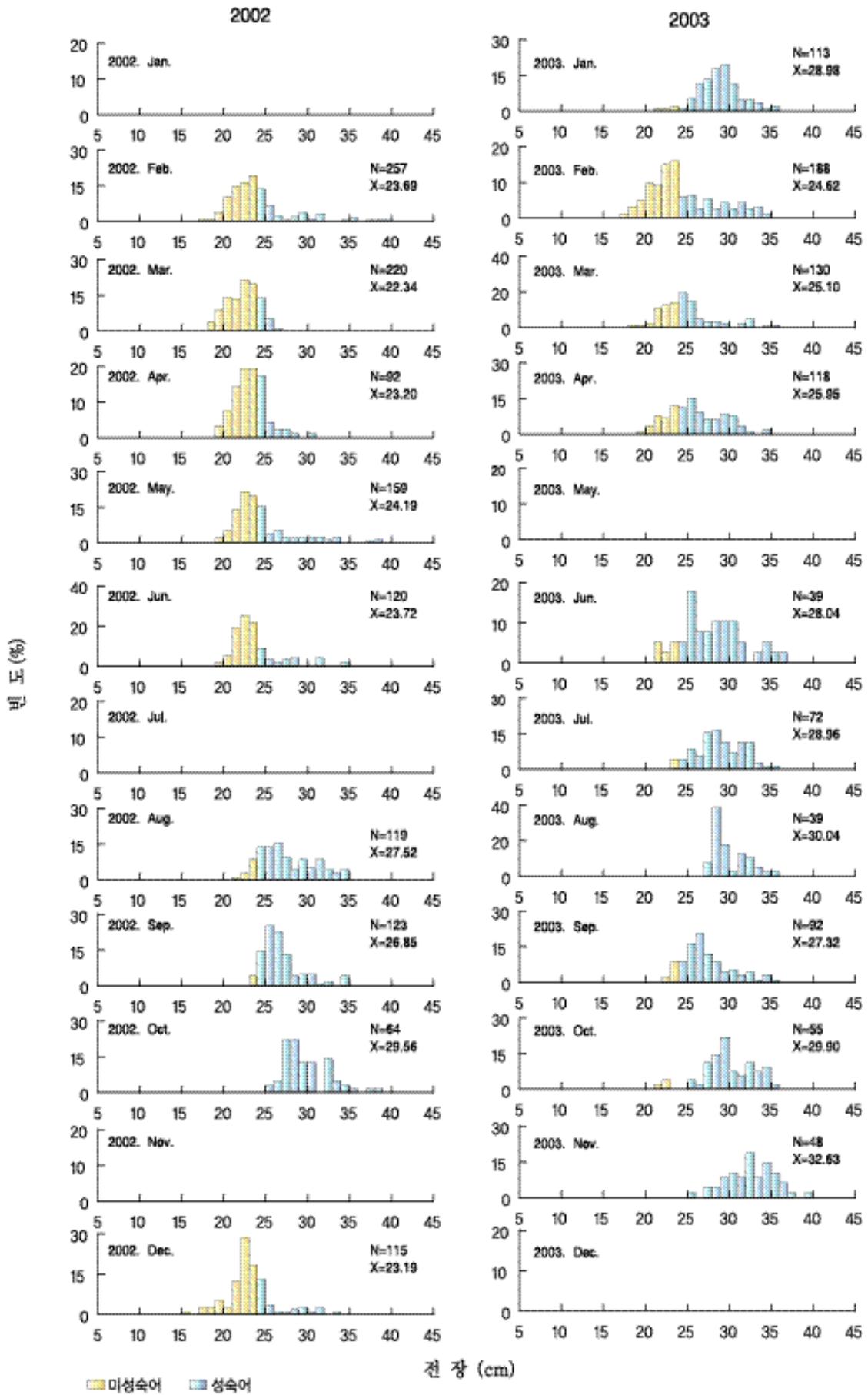
2-55.

가 77% ,
 8% , ,
 가

2002 () 24.40cm (1,269), 2003
 27.18cm (894) , 2004 6 29.52cm (368)
 가 2002 700 55.2% , 2003 226 25.3%
 , 2004 6 11 3.0% . 2002 2
 ~6 61.6~80.5% , 2003 2 ~4
 30%



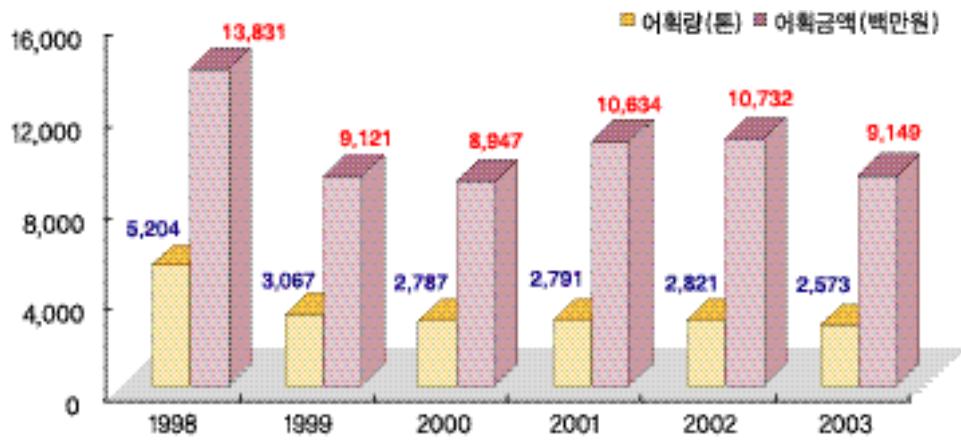
2-58.



2-59.

					100,000
	, CPUE	1998	1,053	2001	2,151
가 .	가	CPUE	가		가

)

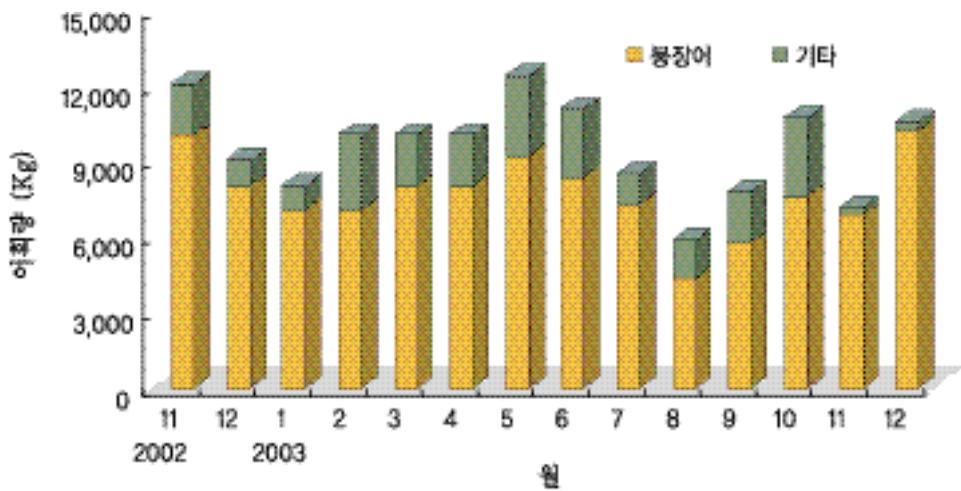


2-60.

()

1998 5,204 가 ,

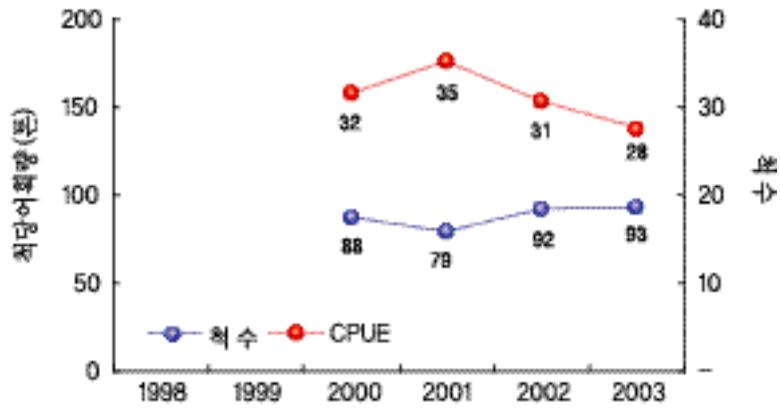
2000



2-61.

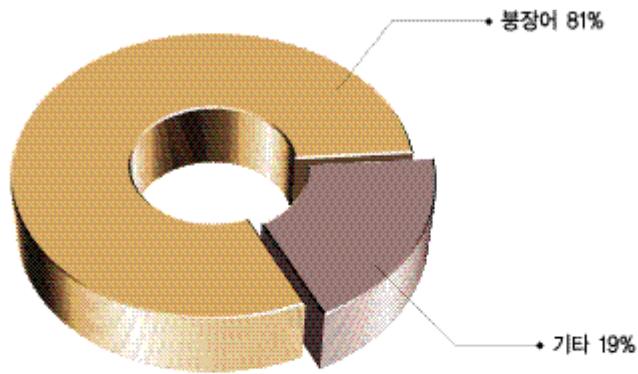
()

2003 5 12,360kg 가 , 2003 8 5,820kg 가



2-62.

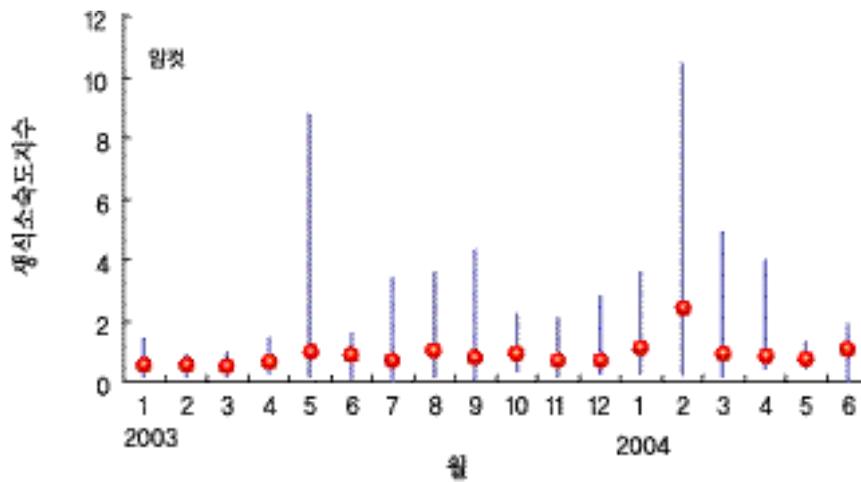
CPUE ()
 2000 88 , 2001 79 , 2002 92 , 2003 93
 CPUE 2000 32 , 2001 35 , 2002 31 , 2003 28



2-63.

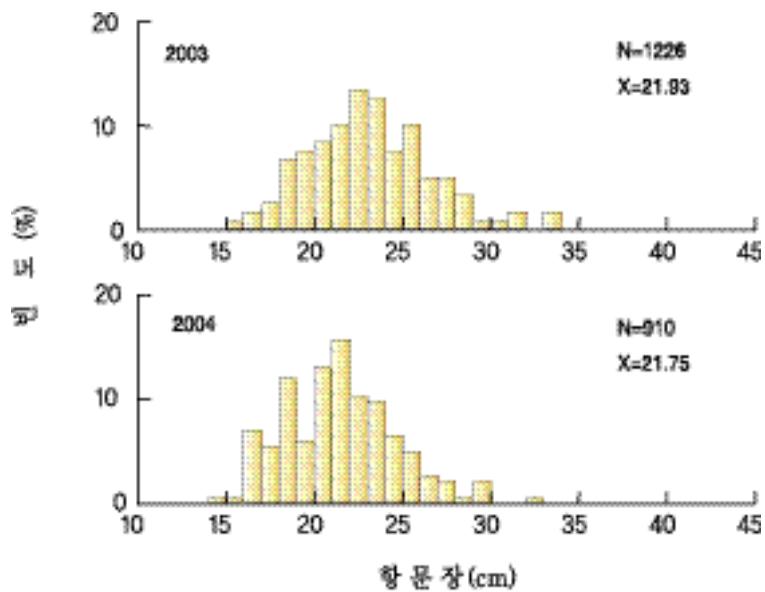
가 81% ,
 EEZ 94, 95 362

가 가 ,
 95.1%, 4.9%
 가 2003 5 2004 2 8.81, 10.40 가 1
 2~5 가

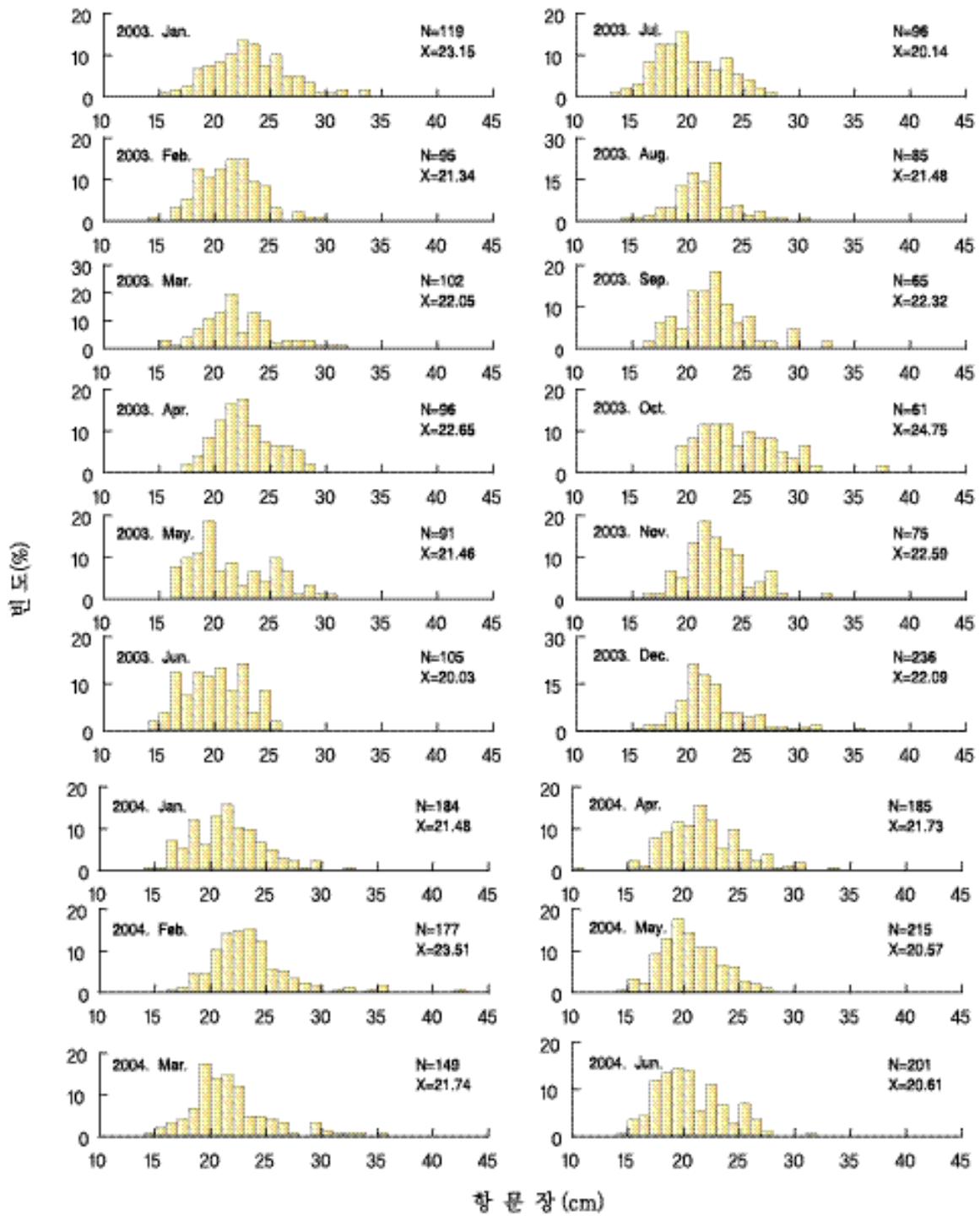


2-64.

2003 () 21.93cm (1,226) ,
 2004 (1~6) 21.75cm (9100) .



2-65.

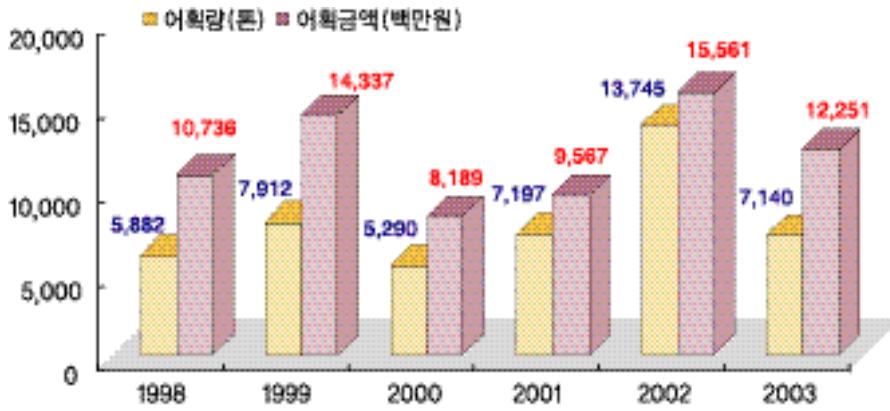


2-66.

CPUE ()
362

가 EEZ 94, 95

)

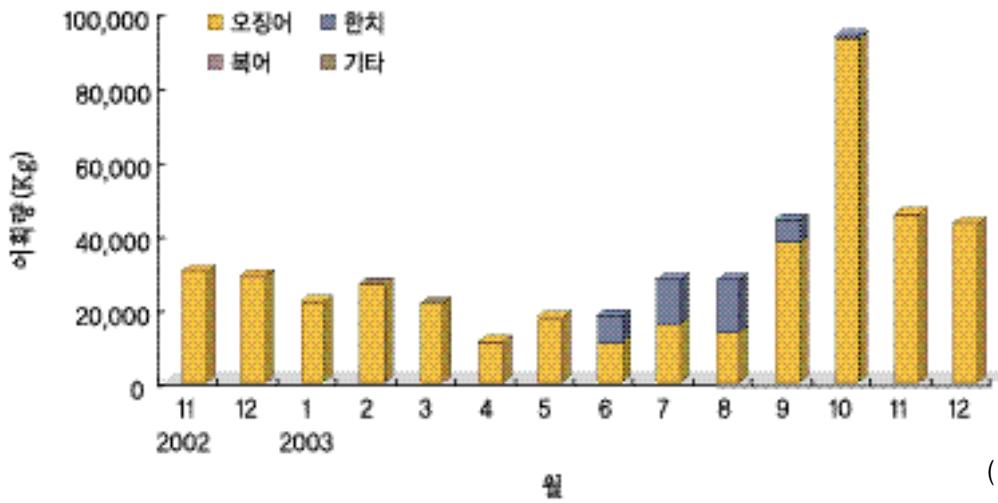


2-67.

()

2002 13,745 가

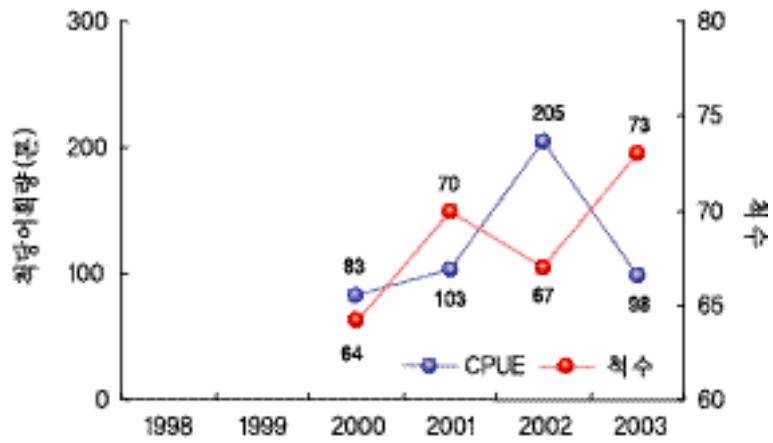
, 2000 5,290 가 .



2-68.

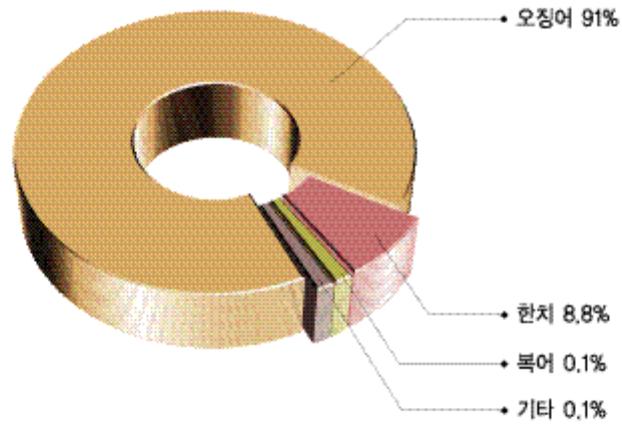
()

93,587kg 가 , 2003 4 10,980kg 가 , 2003 10



2-69.

CPUE ()
 2000 64 2003 73 가
 CPUE 2000 83 2002 205 가 , 2003 98



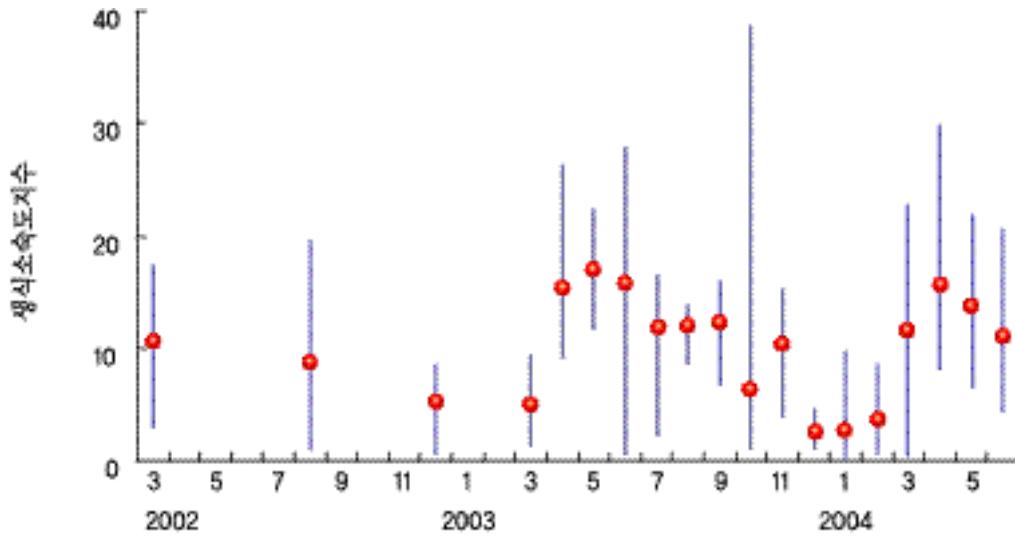
2-70.

가 91%

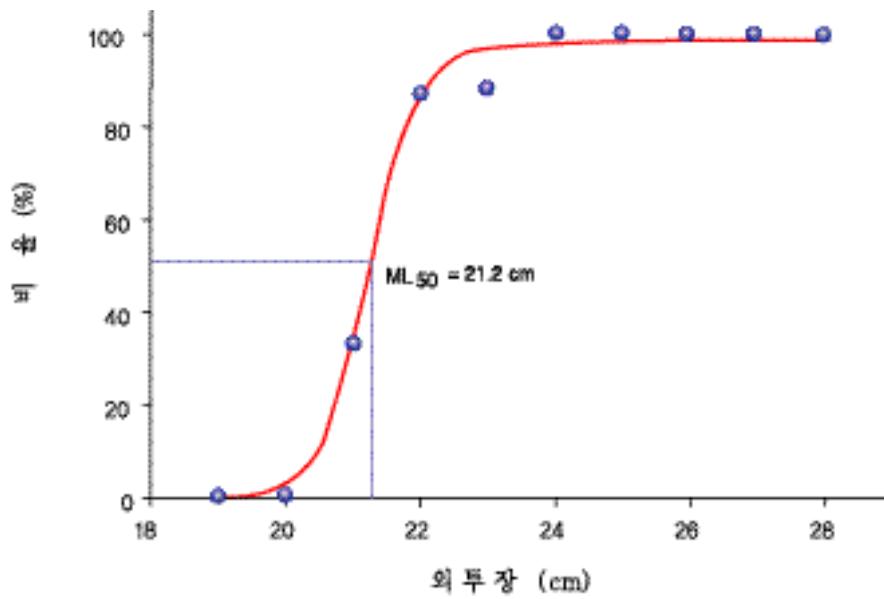
12 - 2

50%

(Mantle Length) 21.2cm

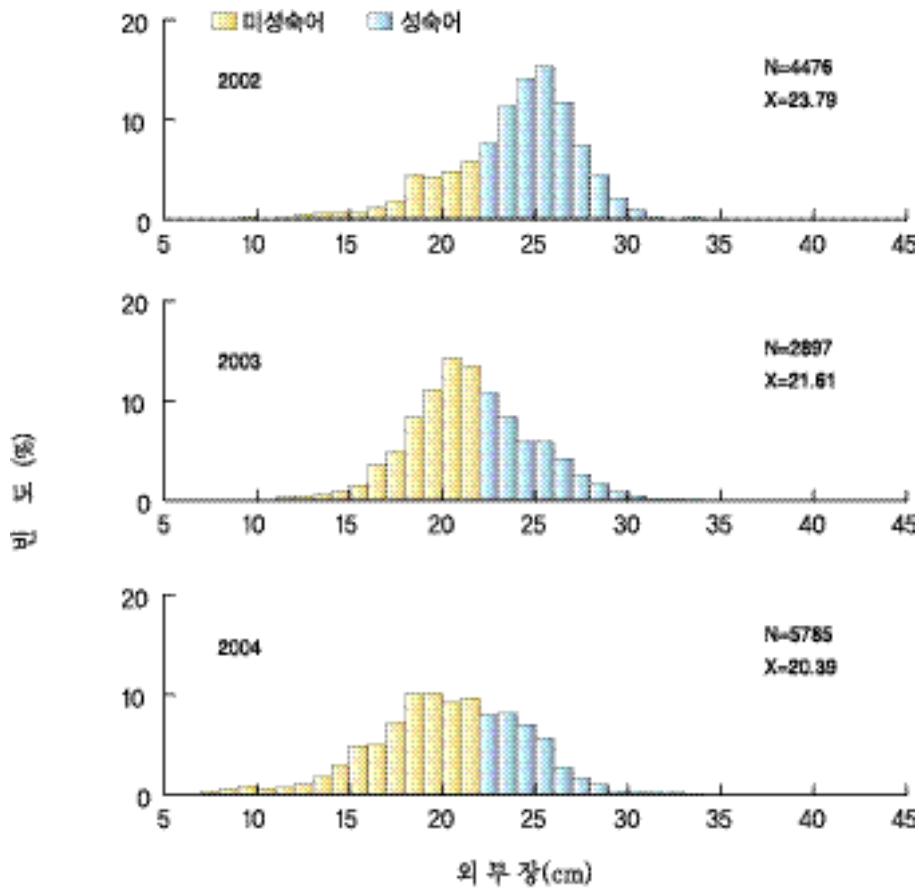


2-71.

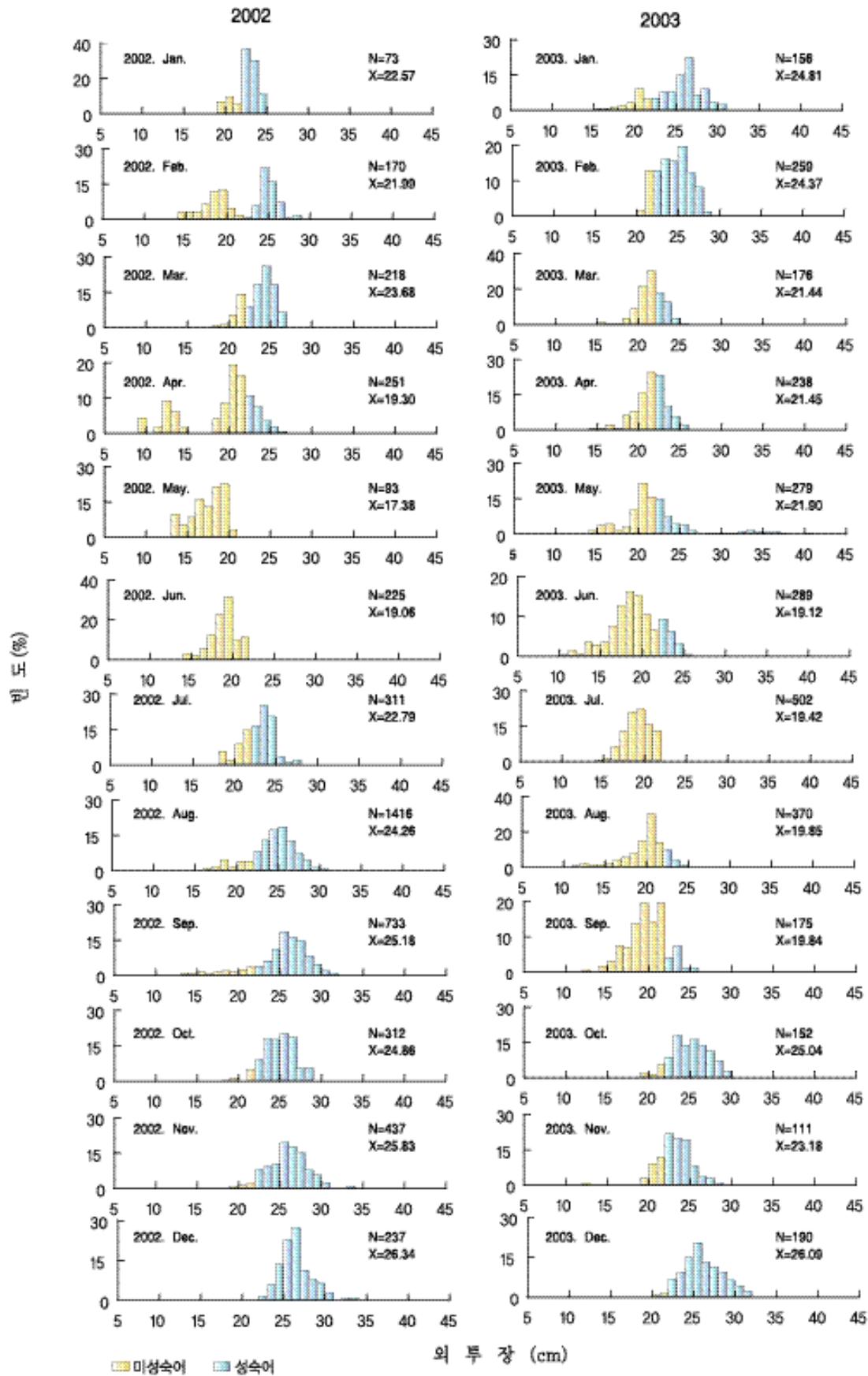


2-72.

2002 23.79cm (4,476), 2003
 21.61cm (2,897) , 2004 6 20.39cm (5,785)
 . 2002 1,128 25.2% , 2003 1,706
 58.89% , 2004 6 3,751 64.8% .
 2002 , 2003 10 ,



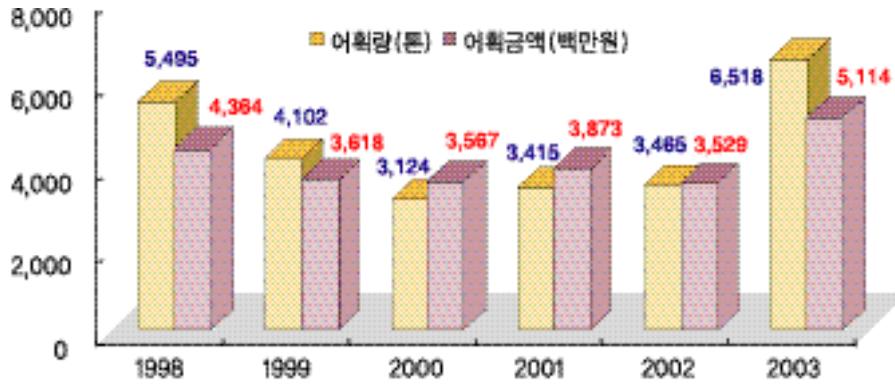
2-73.



2-7.

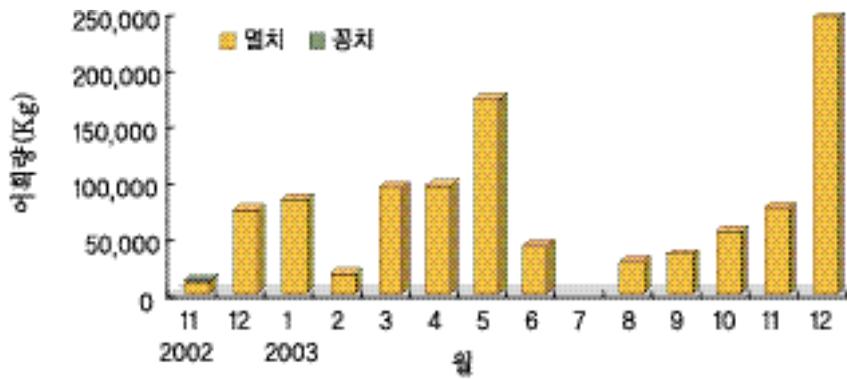
			2001~2003
7,140~13,745	1998~2000	5,290~7,912	.
CPUE ()		가	
가	2003	CPUE	가

)



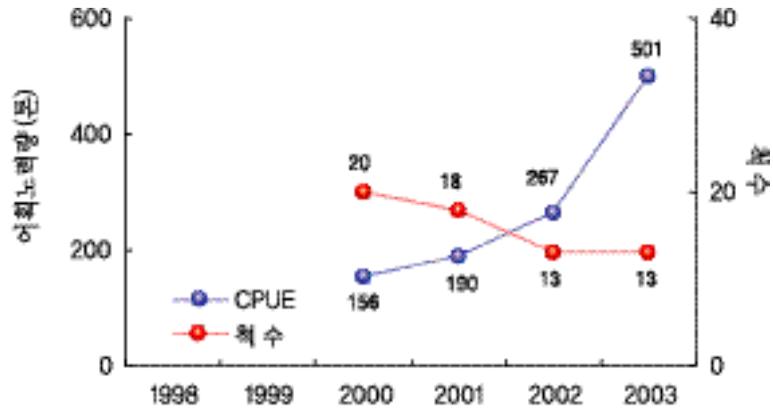
2-75.

2000 3,124 가 , 2003 6,518 가 , 3,618~5,114 .



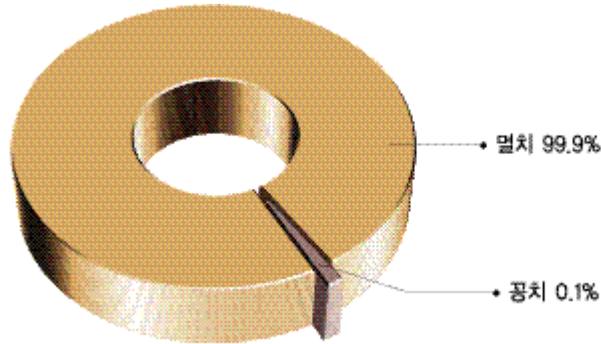
2-76.

2002 11 11,385kg 가 , 2003 12 243,600kg 가 ,



2-77.

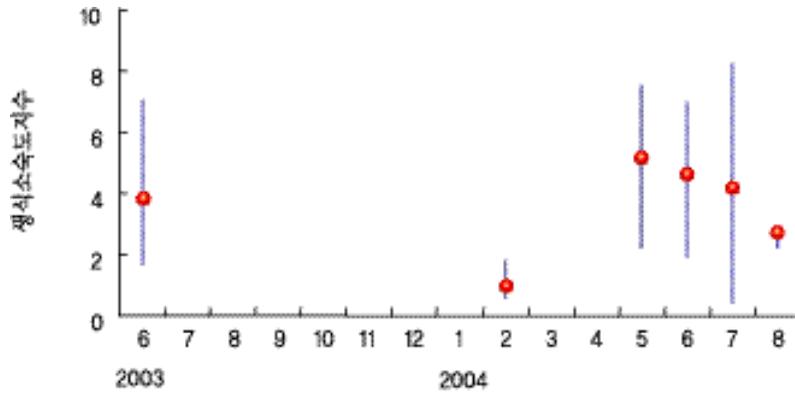
CPUE ()
 2000 20 2003 13 CPUE
 2000 156 가 2001 190 , 2002 267 , 2003 501
 가



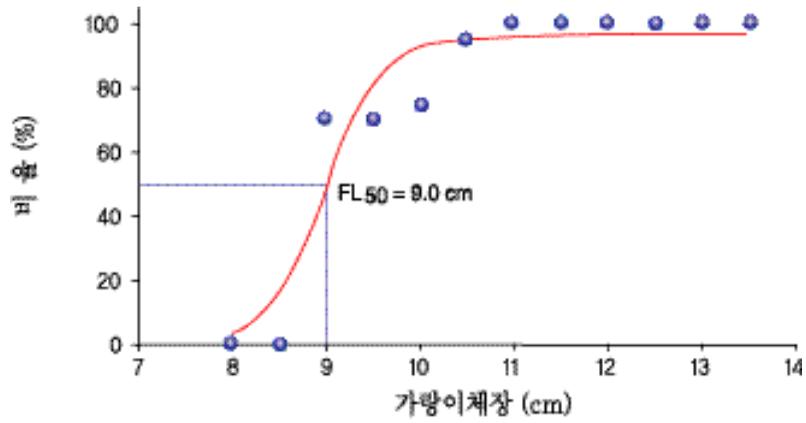
2-78.

가 99.9%

50% 가 4~8 , 5~7
 (Fork Length) 9.0cm

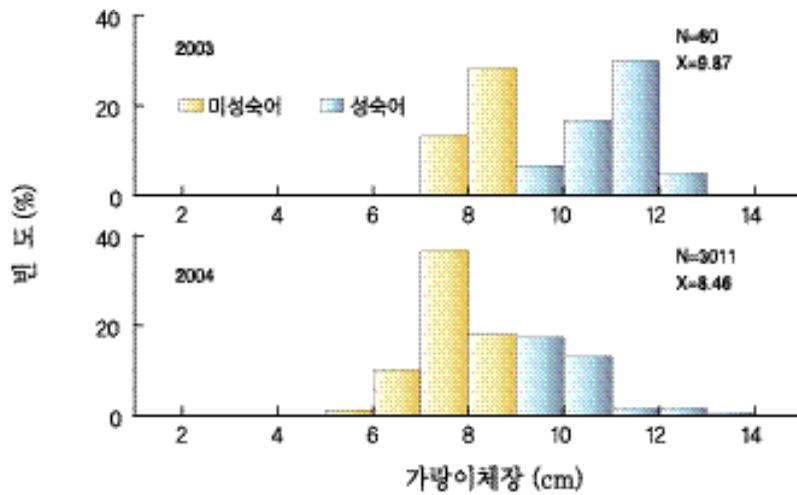


2-79.

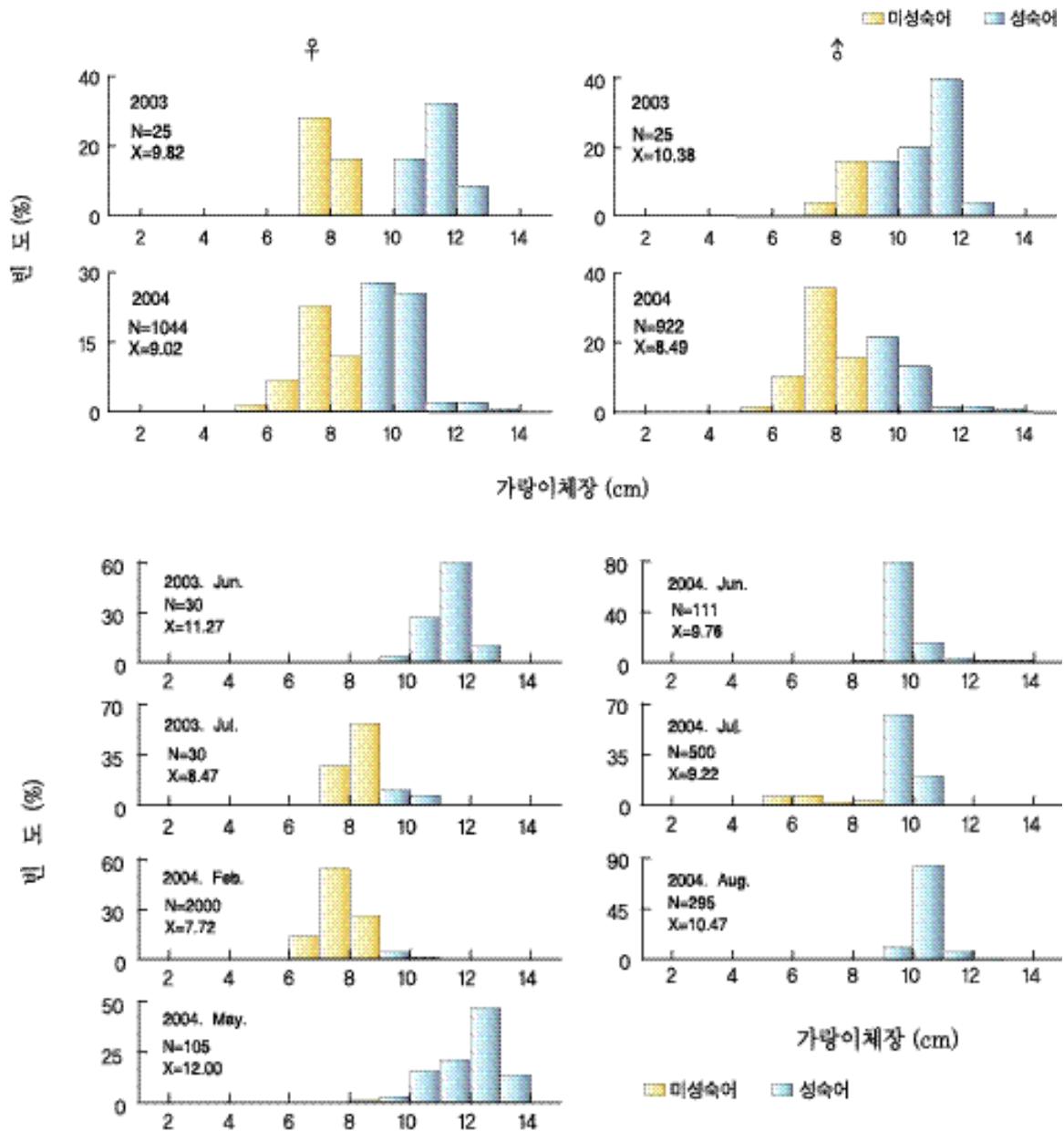


2-80.

2003 (가) 9.87cm (60) , 2004
 8.46cm (3,011) . 2003
 41.7% , 2004 226 25.3% , 2004
 6 1,987 65.9% . 2 가
 5~8 가 .



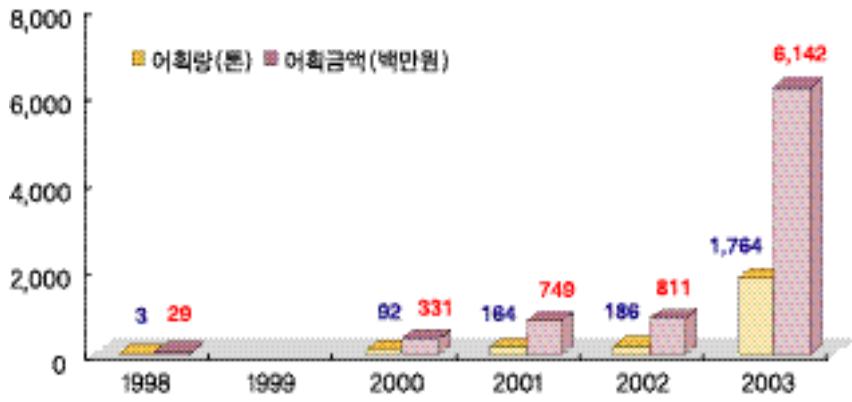
2-81.



2-82.

3,415 , 3,465 CPUE ()가 가 2001, 2002 , 2003 6,518 .

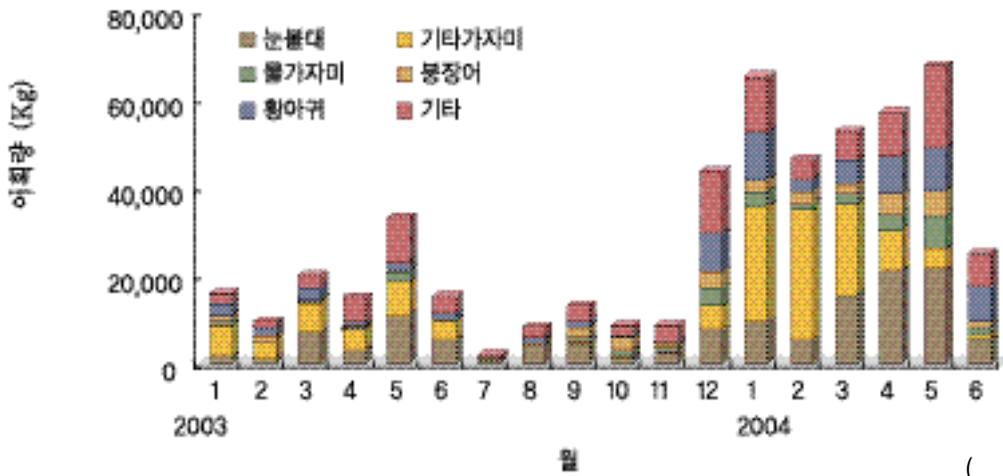
)



()

2-83.

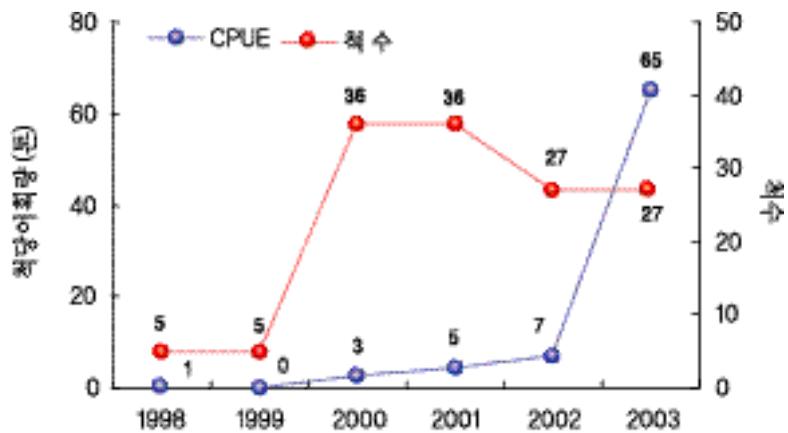
1999
 , 2000 92 , 2001 164 , 2002 186
 2003
 1,764



()

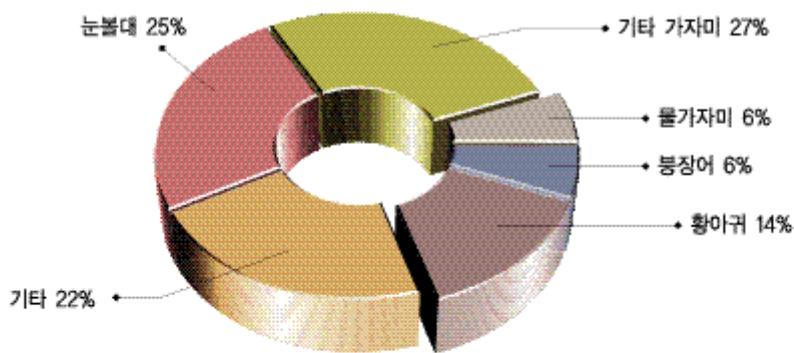
2-84.

2004 5 1 67,748kg, 65,361kg , 2003 7
 1,953kg 가 , 2004 2003



2-85.

CPUE ()
 1998 , 1999 5 2000 2001 36
 , 2002 , 2003 27 . CPUE 1998 1 , 2000 3 , 2002 7
 , 2003 가 65 .

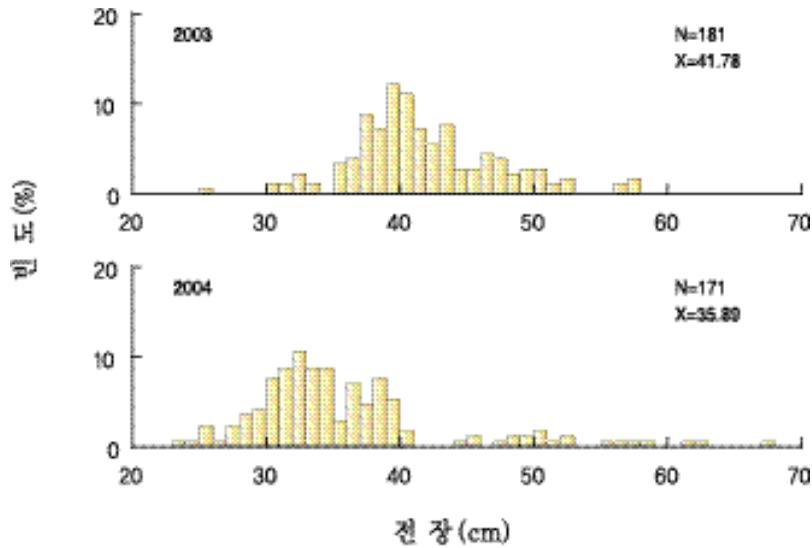


2-86.

가 25%,
 14%, 가 가 6% .

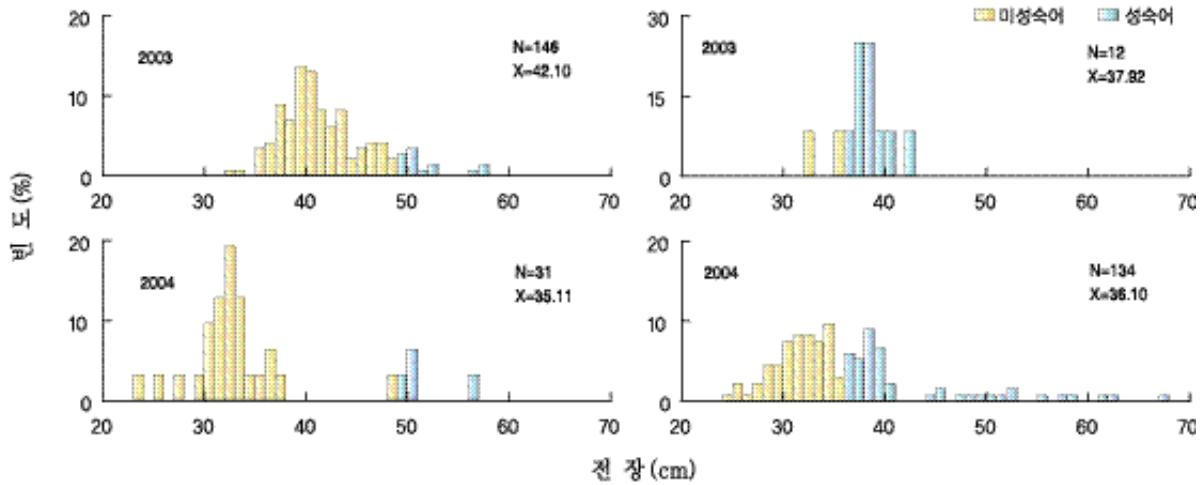
()

() 2003 42.1cm(146) , 2004
 35.11cm(31) . 2003 37.9cm(12) ,
 2004 36.1cm(134) .
 2003 131
 87.9% , 2004 27 87.1% , 2003 2
 16.7%, 2004 79 58.9% .



♀

♂

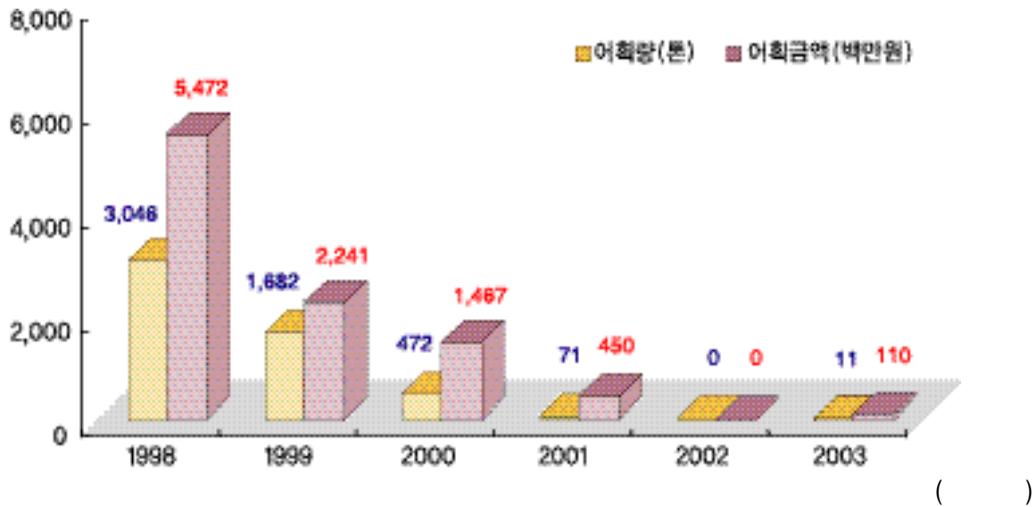
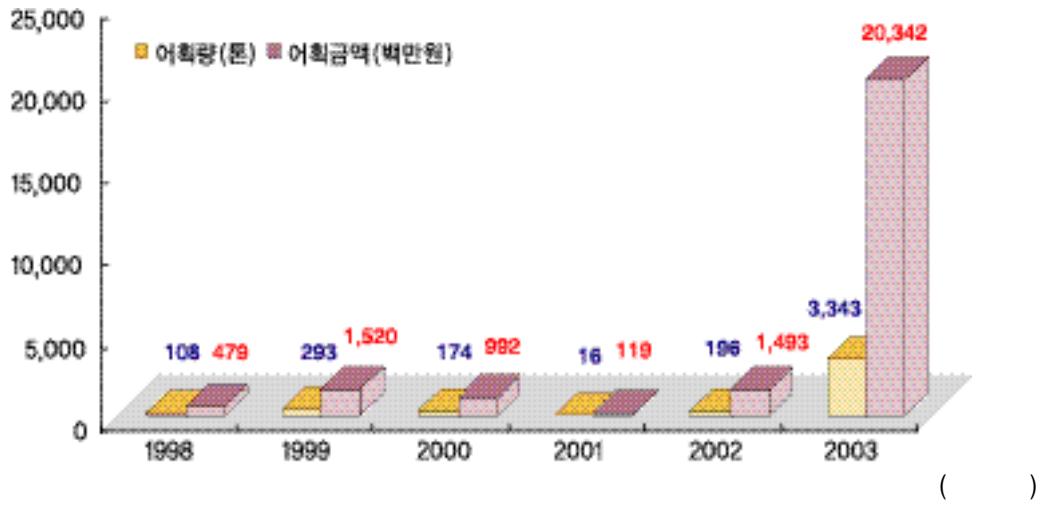


2-89.

가

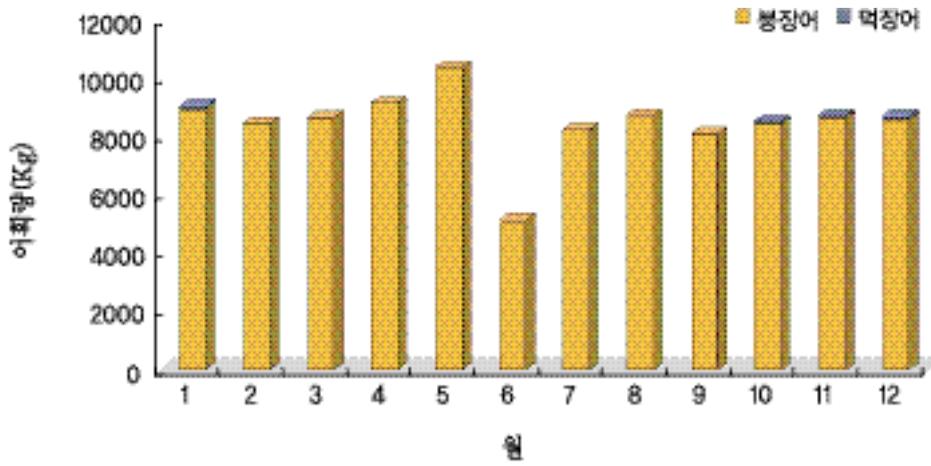
2003 1,764 가 , CPUE 가 .
 가27 .

)



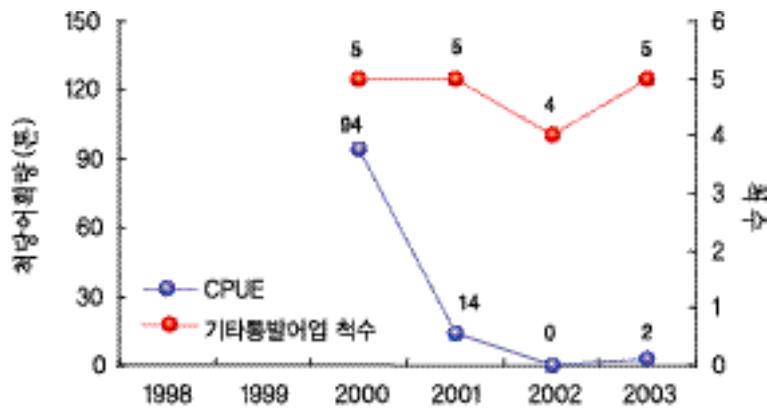
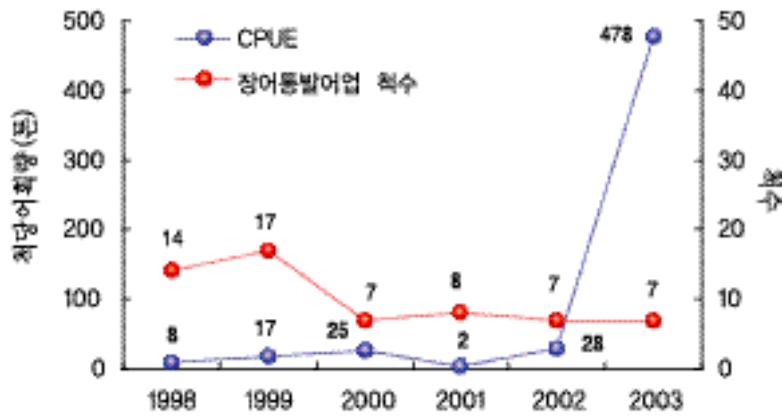
2-90.

1998 108 , 1999 293 , 2000 174 , 2001 16 ,
 2002 196 , 2003 3,343 가 .
 1998 3,046 , 1999 1,682 , 2000 472 , 2001 71
 , 2002 0 , 2003 11



2-91.

2003 5 10,360kg 가 , 2003 6 5,110kg 가 .



2-92.

CPUE ()

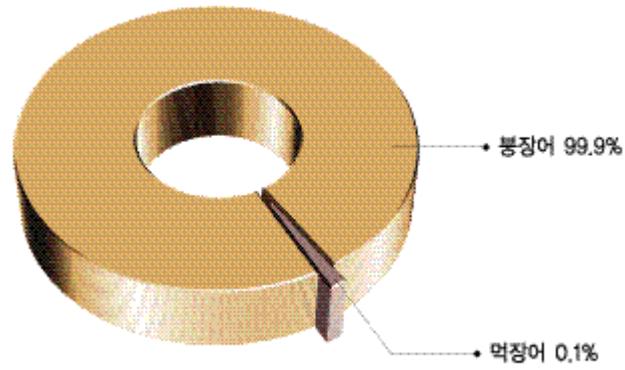
1998 39 2003 7 . CPUE

1998 2002 1~15 2003 478

가 .

2000 3 2003 5 , CPUE 2000

157 2003 2 .



2-93.

가 99.9%

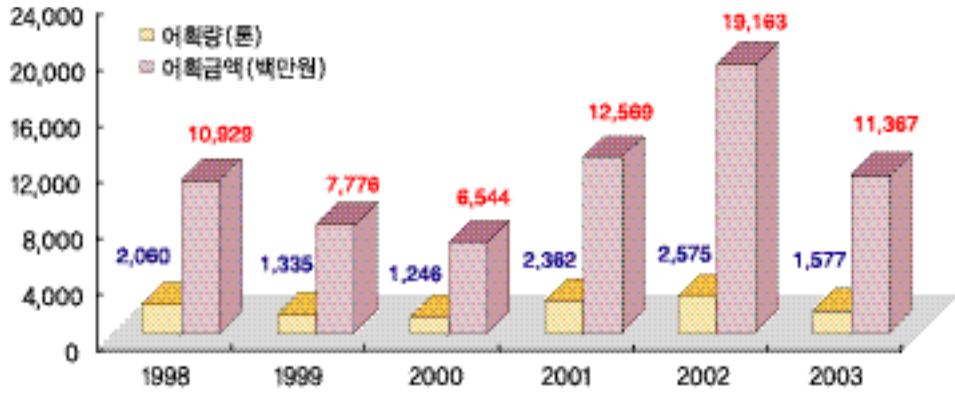
2003

CPUE

가

2)
가)

(CPUE)



()

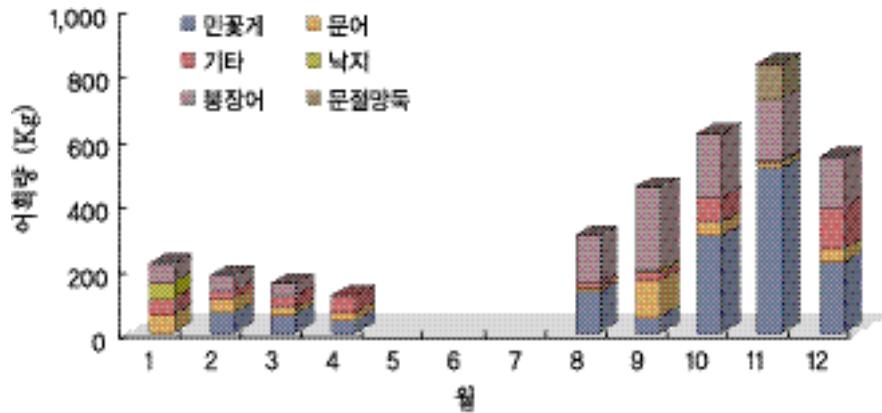
2-94.

. 2002 2,575

가

, 2000 1,246

가



()

2-95.

1

11

824kg

가

, 4 109kg

가

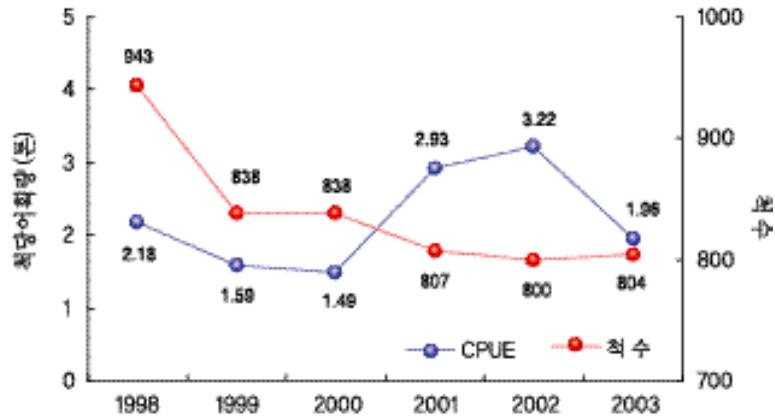
. 9

가

, 1

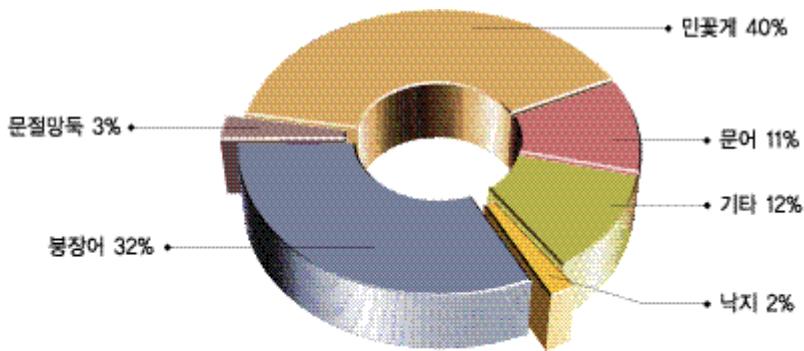
4

5~7



2-96.

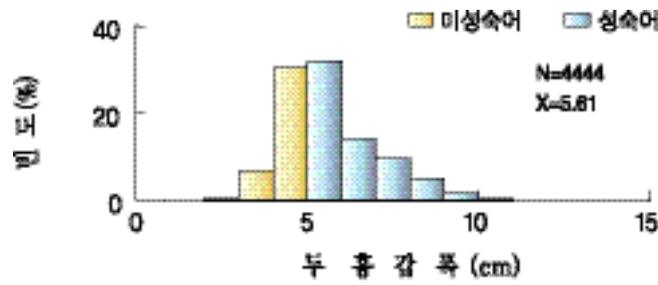
가 1 , CPUE 1998 2.18 , 1999 1.59 , 2000 1.49 , 2001 2.93 , 2002 3.22 , 2003 1.96 가 1998 943 , 2003 804 , CPUE 1998 2.18 , 1999 1.59 , 2000 1.49 , 2001 2.93 , 2002 3.22 , 2003 1.96



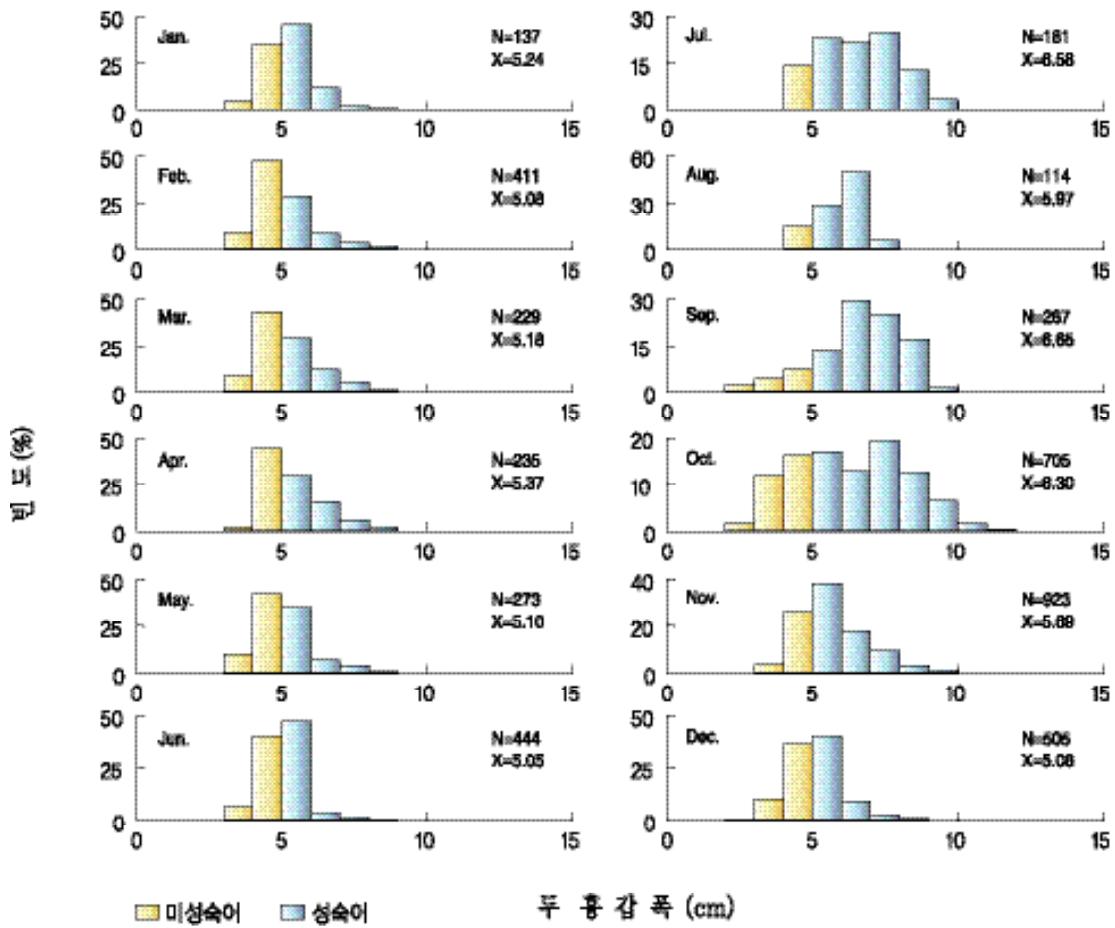
2-97.

가 40% , 32% , 11% , 3% , 99 가

6~8 . 50%
 (Carapace Width) 5.3cm, 0.6 ,
 (Carapace Width) 6.2cm, 1.06 .
 (5.3cm) 1,670 37.6% .
 () 5.61cm (4,444) ,
 7~10 5.97 - 6.65cm .



2-98.

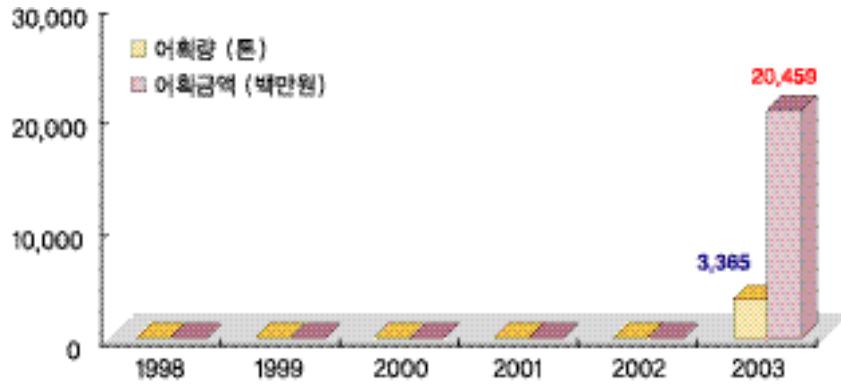


2-99.

가 가 , .

가 , 가 CPUE () 가 .

)



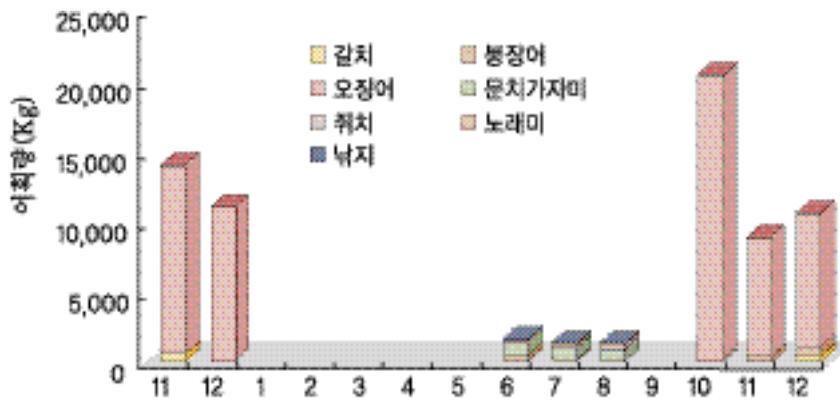
()

2-100.

2003

2003 3,365 ,

20,459



()

2-101.

3 10 20,364kg

가 , 1 ~ 5 , 9

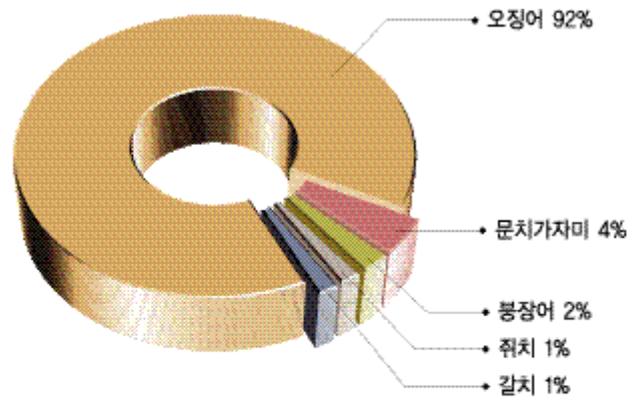
. 6 8

가

CPUE () 2003 1

3,365 , 1,487

2.26

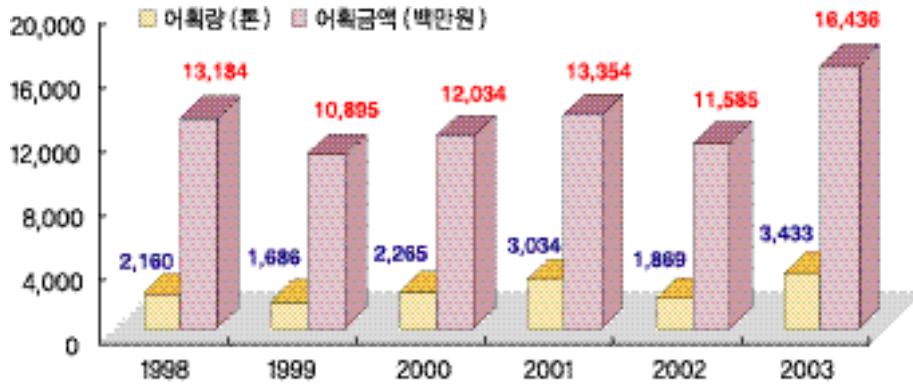


2-102.

가 92% , 가
 4%, 2%, , 가 1% , ,
 . 99 .

가 ,
 .

)



2-103.

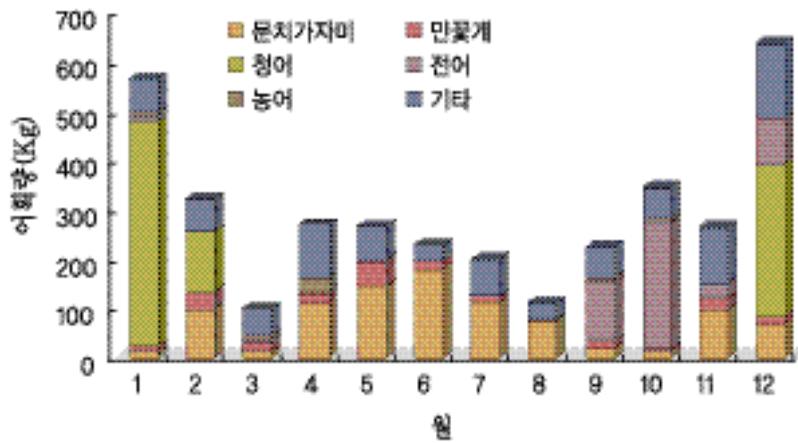
()

가

, 1999 1,686

가

. 2003 3,433



2-104.

()

CPUE

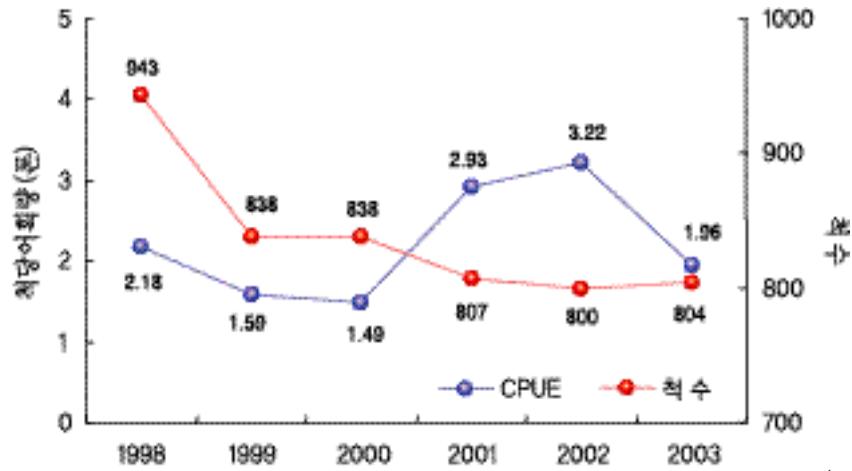
,
가

가

가

가 3 95kg 가 . 12~2

가 가



()

2-105.

CPUE

가

가1

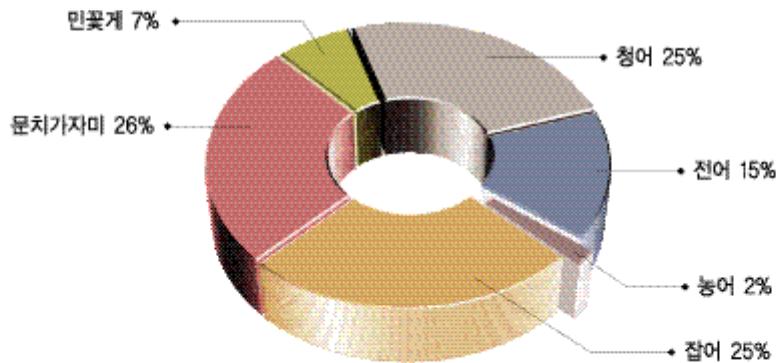
1

가

CPUE ()

1998 876 2003 795

. CPUE 1998 2.47 , 1999 2.02 , 2000 2.73 , 2001 3.70 , 2002 2.30 , 2003 4.32



2-106.

15%, 7% . 가 26%, 25%, , ,

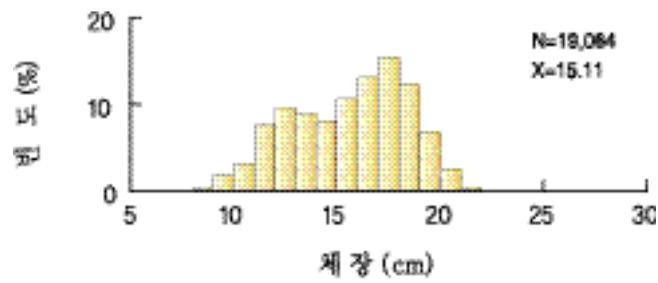
92 가

가

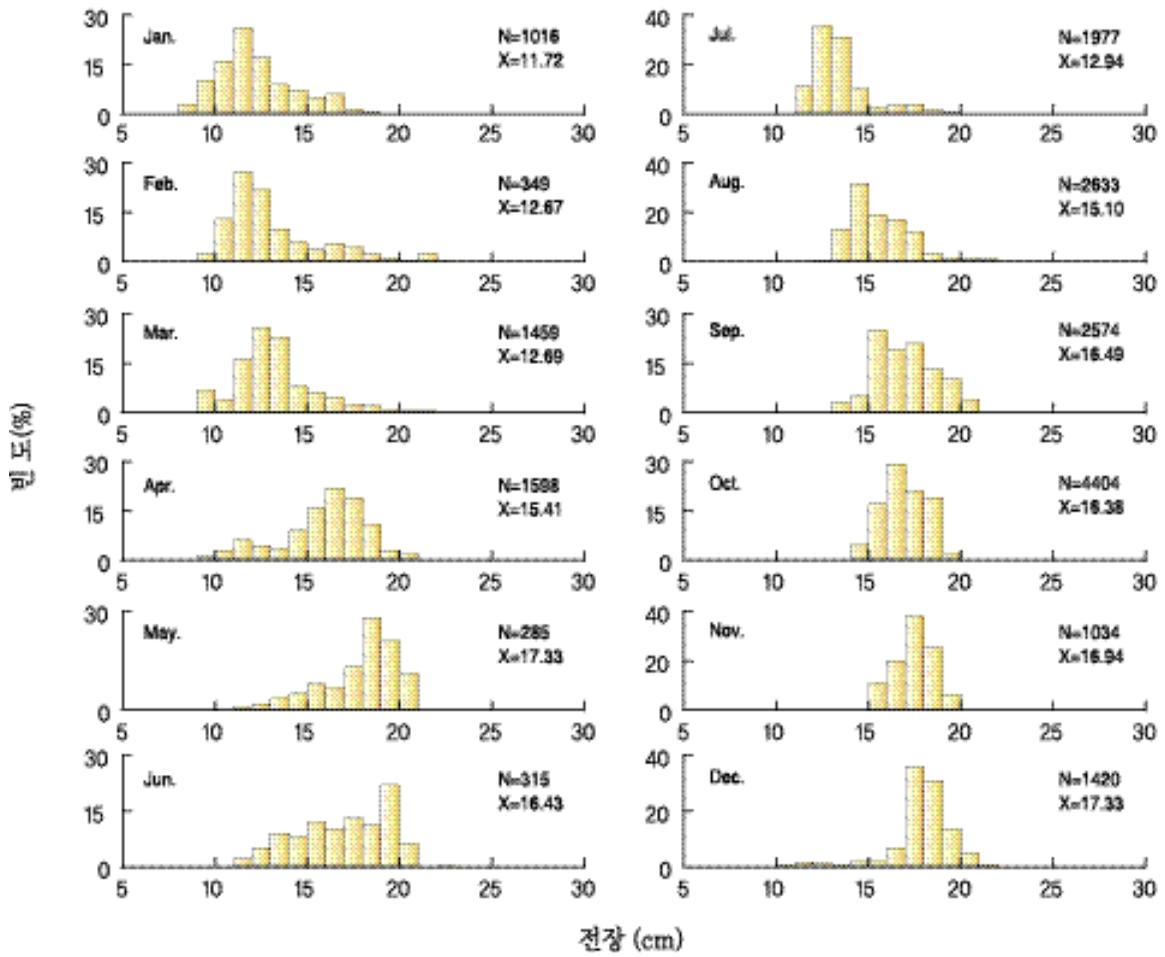
가

가 () 13.38cm(

3,539) ,

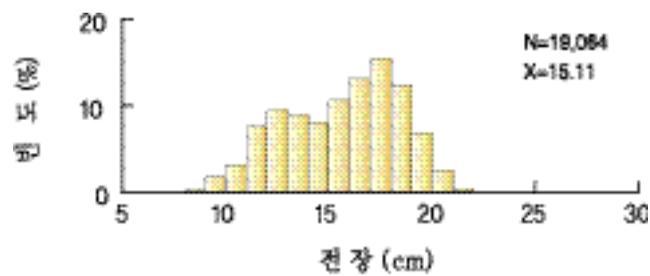


2-107. 가

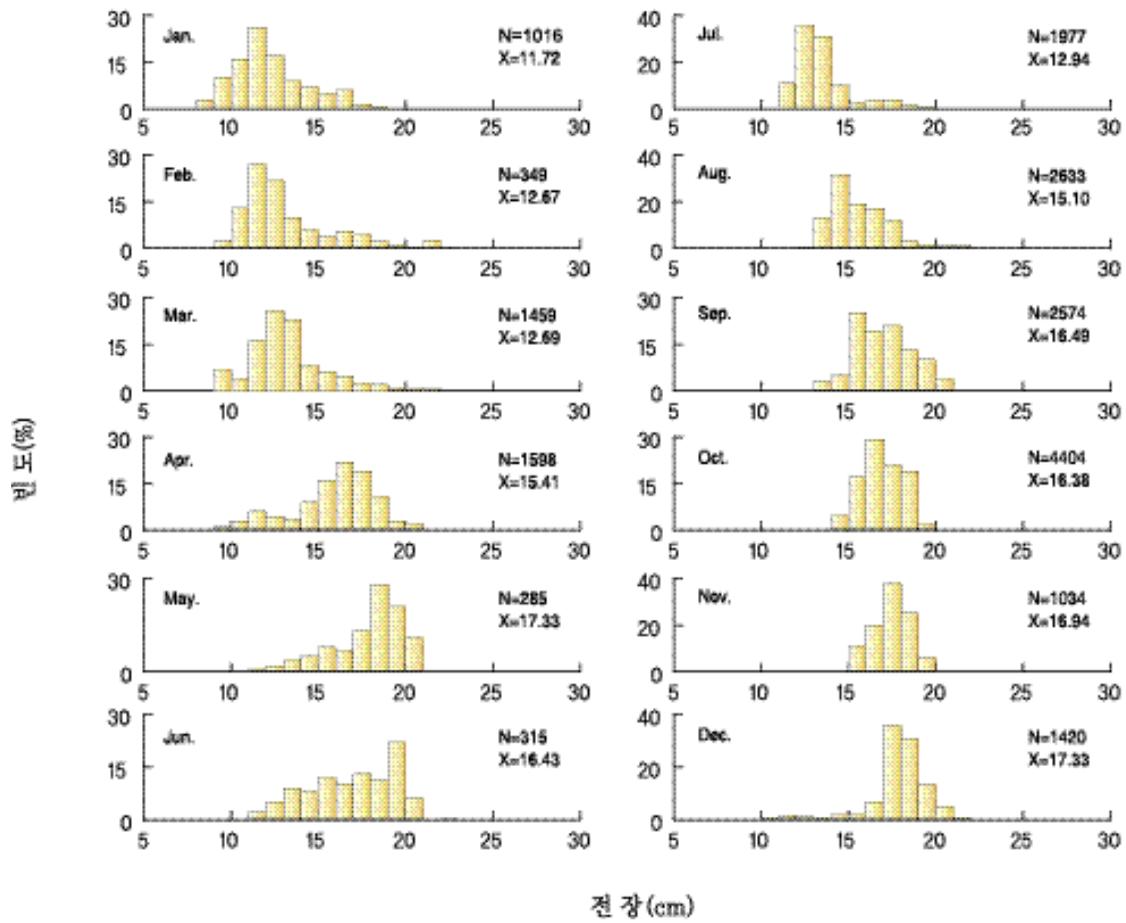


2-108. 가

4~8 , 6~7 .
 () 15.11cm(19,064) , 1~3 7
 11.7~12.9cm , 15.1~17.3cm



2-109.



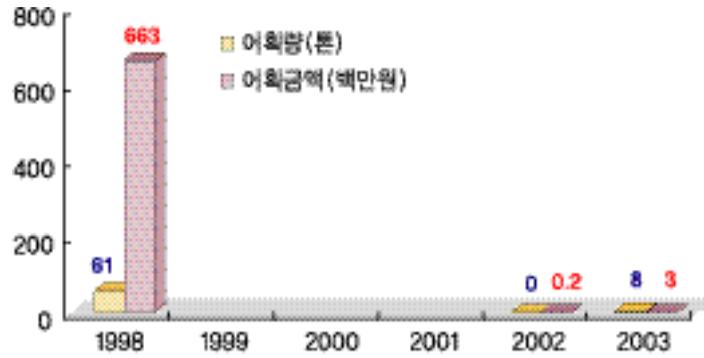
2-110.

가
가

, 가

CPUE ()

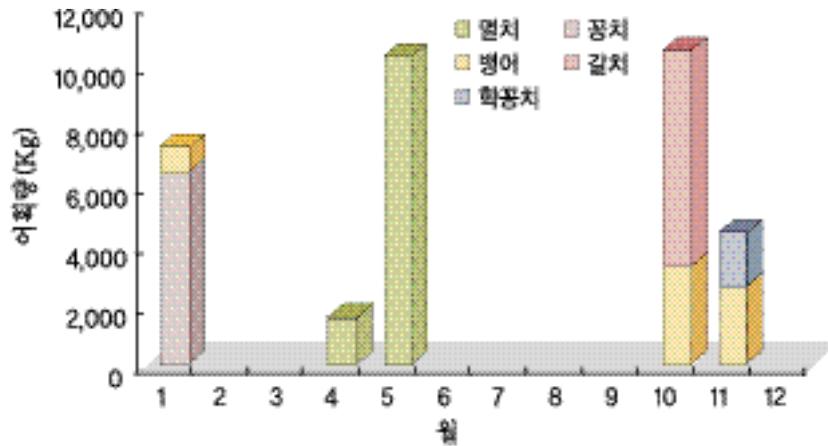
) ()



2-111.

()

1998 61 가
 , 1999 ~ 2001 , 2002
 가 , 2003 8 .



2-112.

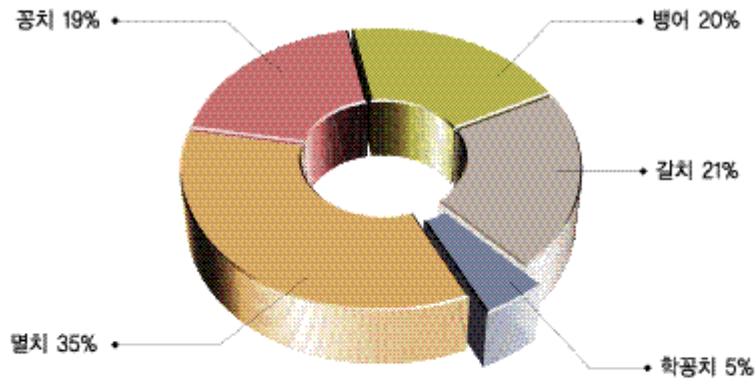
()

1 10 5
 10,480 kg, 10,270 kg , 2 ~ 3 , 6~9 , 12
 4~5 , 10~11 , 1

가 9

CPUE

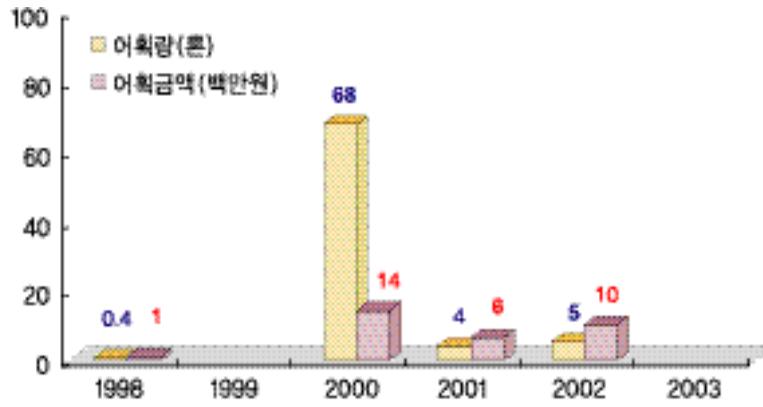
가 .



2-113.

, 35%, 21%, 20%, 19%
92 .

) ()

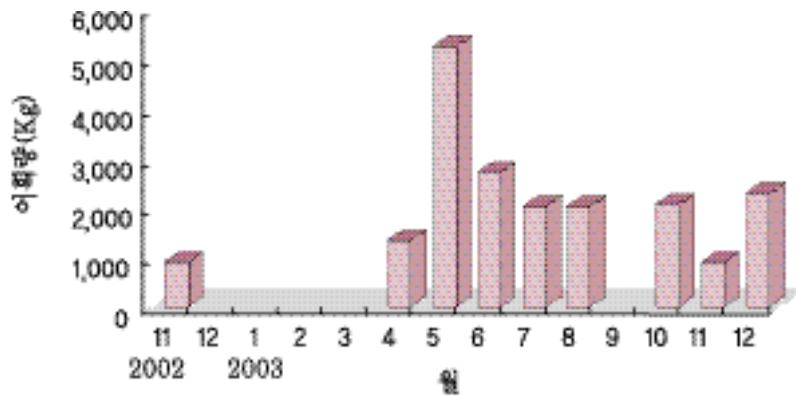


2-114.

()

가 가

68 가 , 2001 4 , 2002 5 , 2003 . 2000



2-115.

()

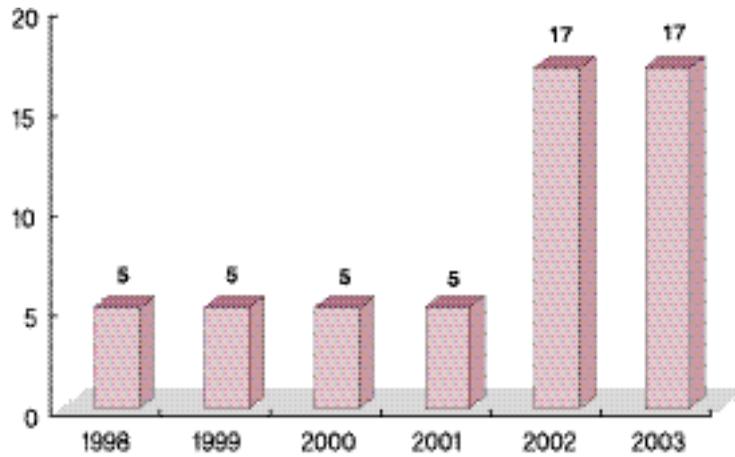
가 , 12~3 9 1 5 5,250 Kg

가

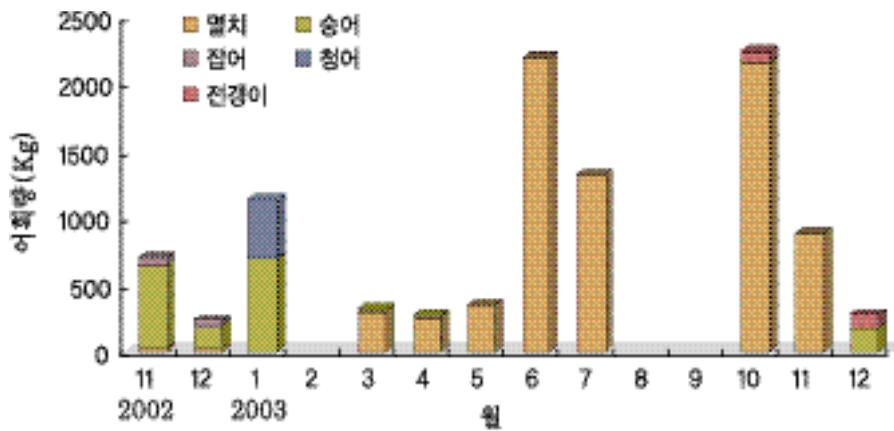
1~2

3)
가)

1998 ~ 2001 5 , 2002 ~ 2003 17 ,
가가 , 가 .



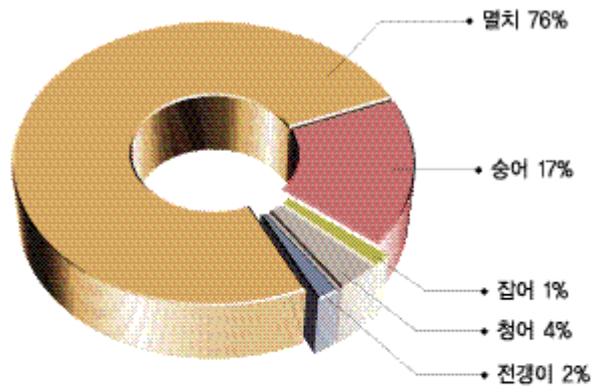
2-116. 가



()

2-117.

2,250kg, 2200kg , 3~5 1 10 6
263~348kg . 2, 8, 9



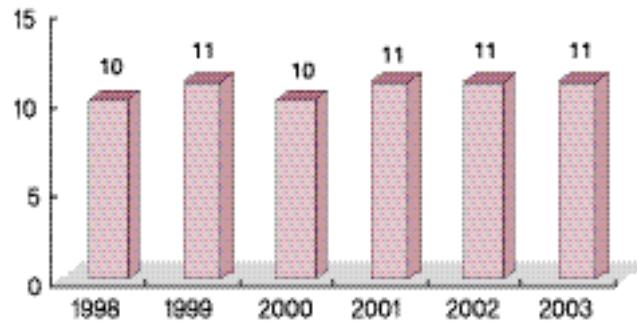
2-118.

가 가 76% , 17%, 4%, 2% .

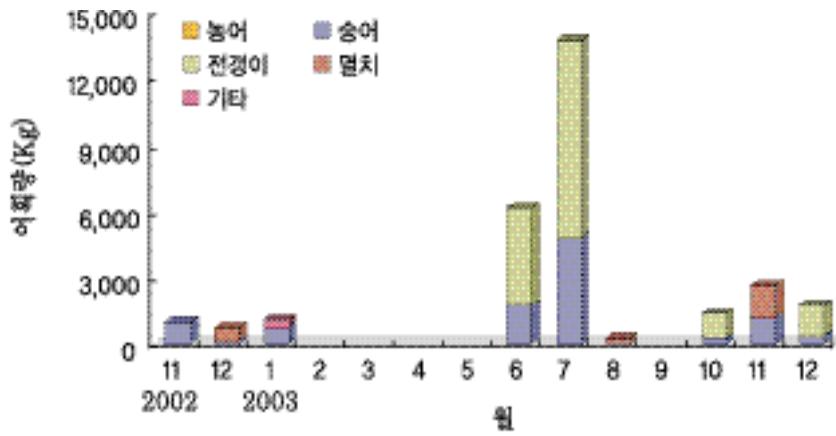
92 , 1~3 .

)

1998 10 , 1999 11 , 2000 10 , 2001 11 ,
2002 11 , 2003 11
가

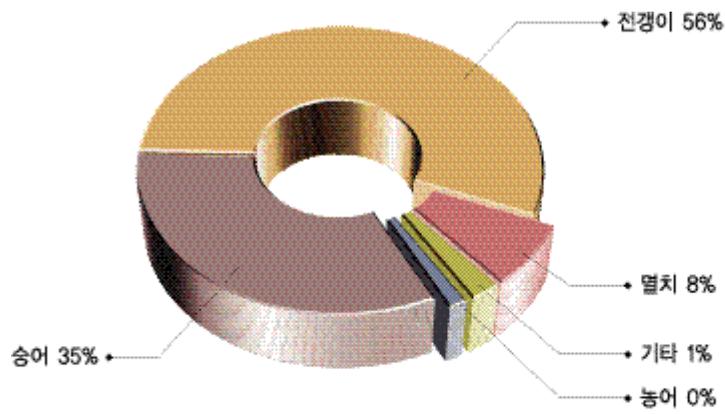


2-119. 가



2-120.

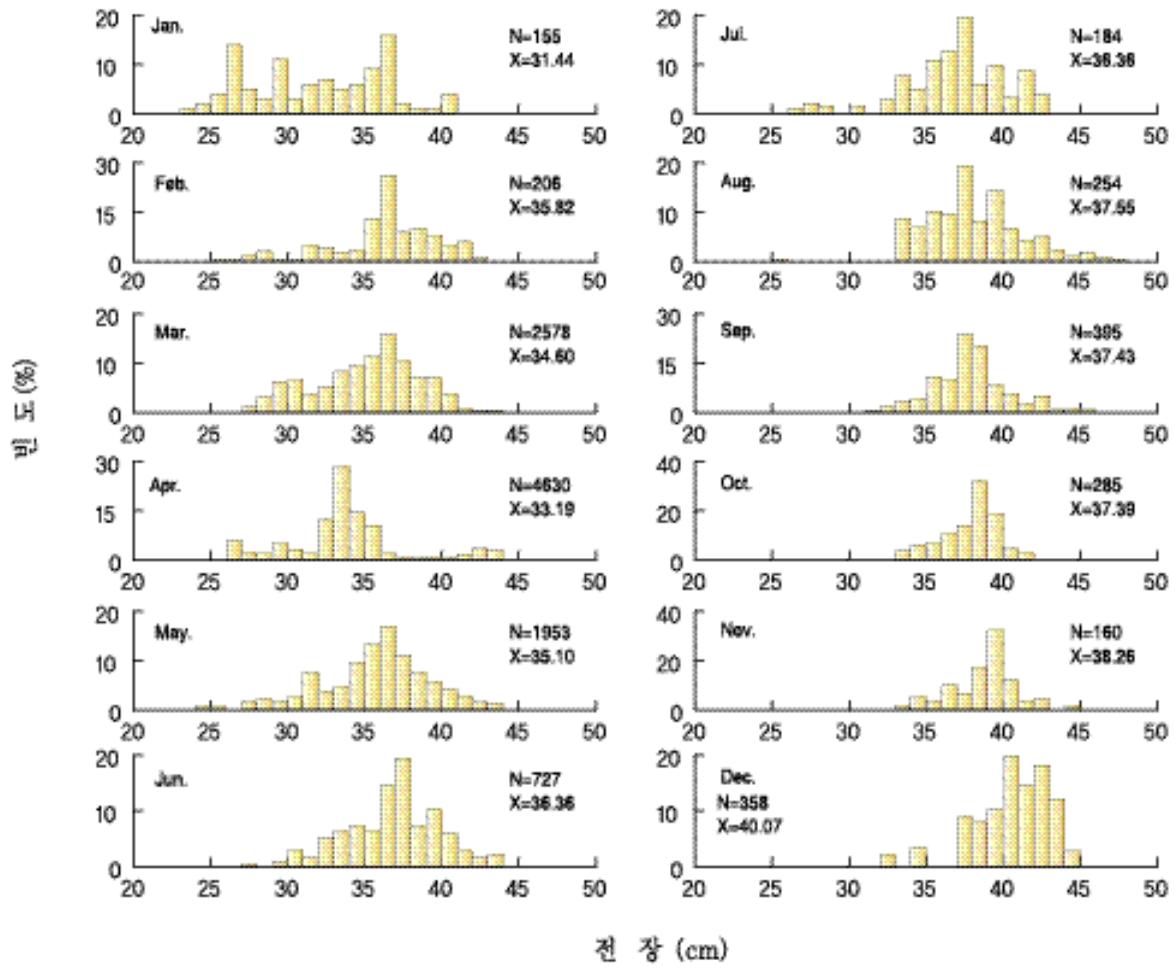
1 7 13,700kg 가
, 6 6,150kg , 8 , 10~12
, 2, 3, 4, 5, 9 .



2-121.

35%, 8% , 가가 56% ,

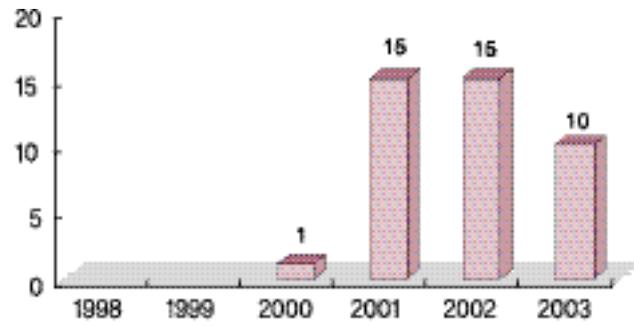
() 36.13cm (11,885) , 5~8 . 3~4 cohort가



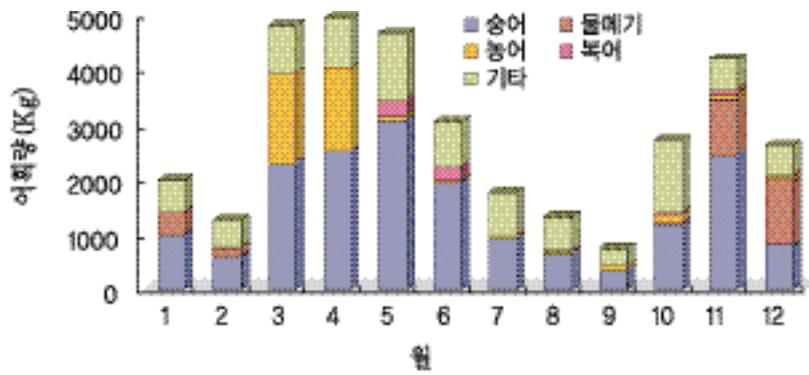
2-122.

)

2000 1 , 2001 2002 15 2003 10



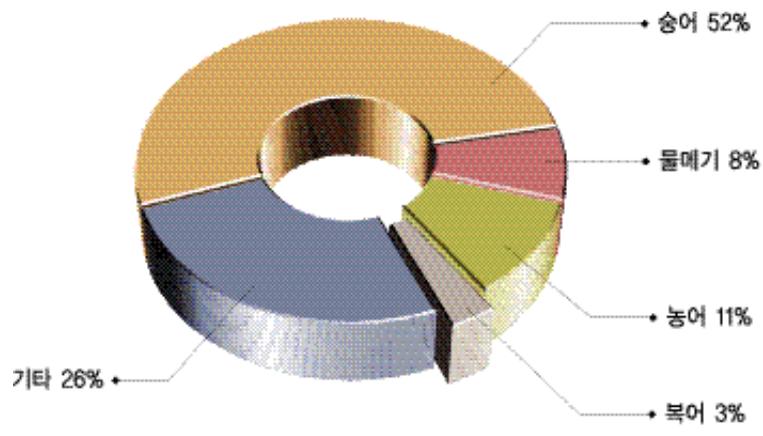
2-123. 가



2-124.

()

4,168~4,901kg , 9 732kg 가 . 3~5 11



2-125.

11%, 8%, 3% . , 가 가 52% ,

가

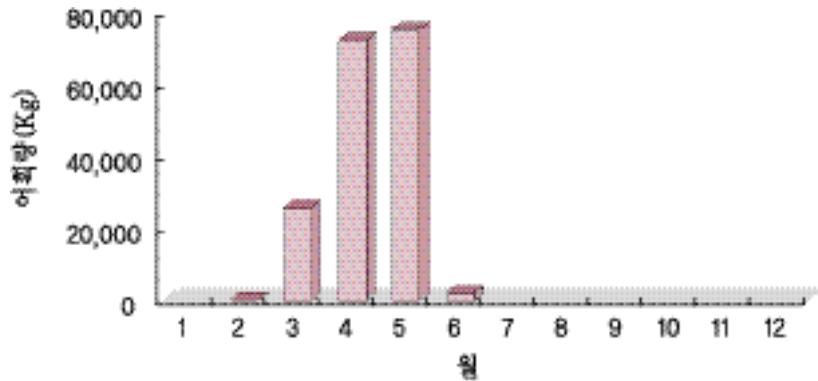
1

)

3 가가 , 1998 ~2001 4 가가 , 2002 ~2003 () 3

)

가 1 가가 , 가 . 6 ,



()

2-126.

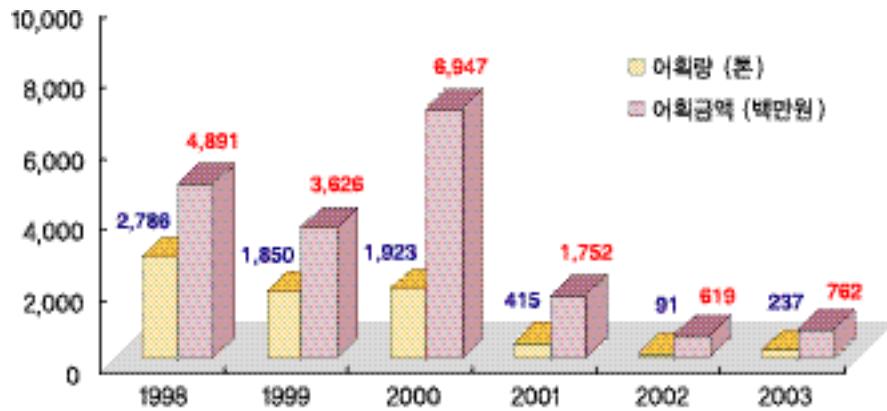
72,100, 75,300, 2,030kg , 1 2~6 70, 25,500, 7~12 (Mugil cephalus)

4)

가) 가

26 , 1829ha

)



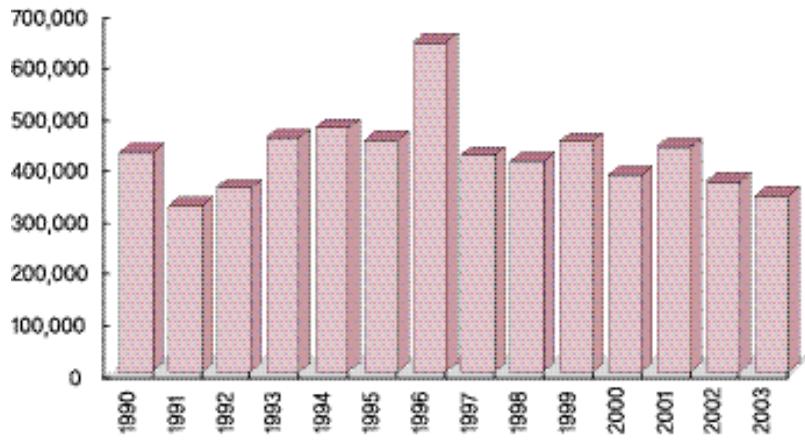
2-127.

. 1998 2,786 가
, 2002 91 가 , 2003 237

4 , 3

2-1.

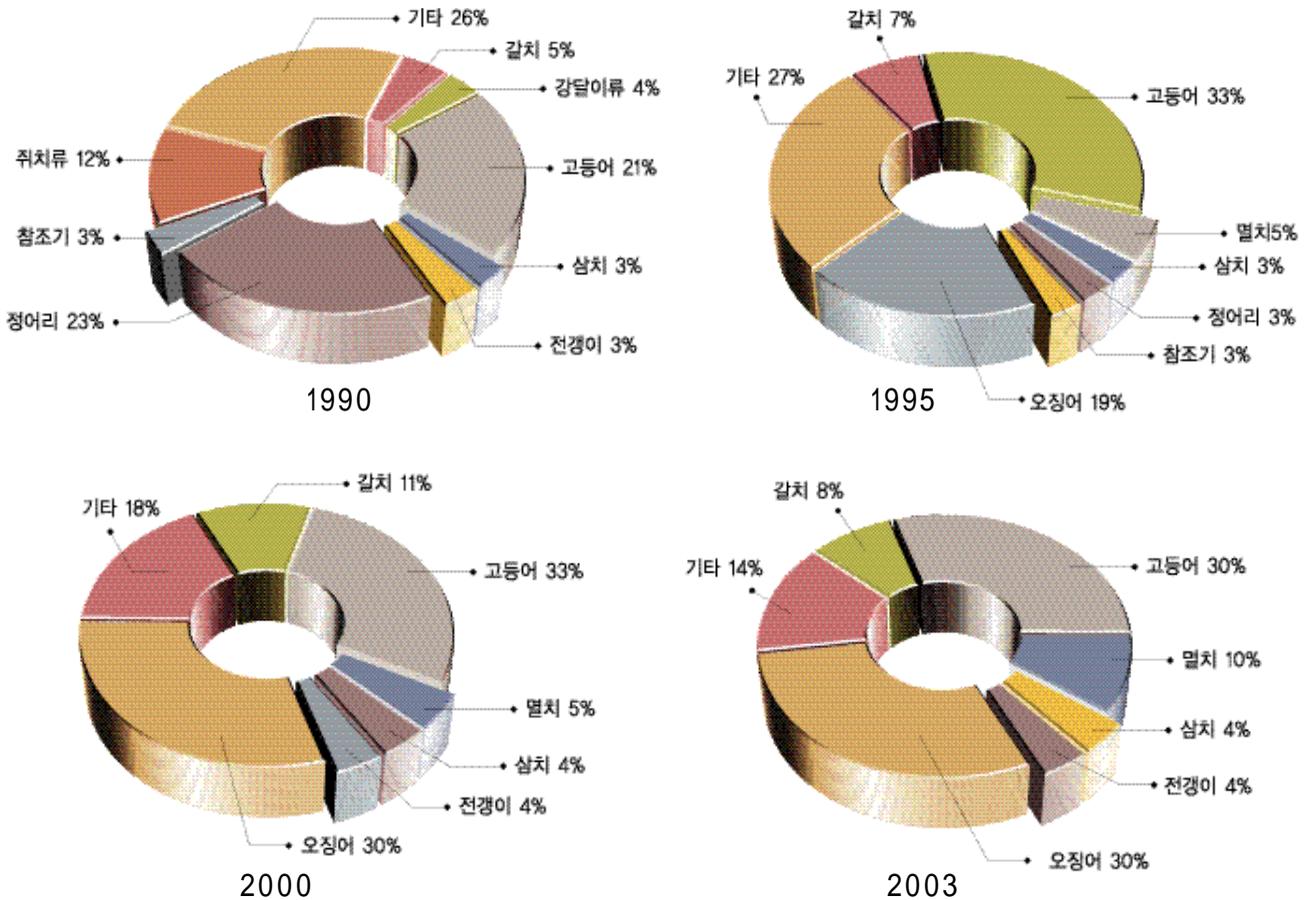
		(kg)													
2002		55	20	7,665	600	-	50	3,000	-	-	-	800	550	165	2,500
2003		24	240	119,820	5,720	9,100	10,800	1,500	19,800	21,900	17,500	-	-	-	19,400
2003															
2003															



2-128.

1990 2003 1996 640,239 가
 , 1991 320,009 가 . 2002 2003
 367,776 , 342,579 (423,214)

1)



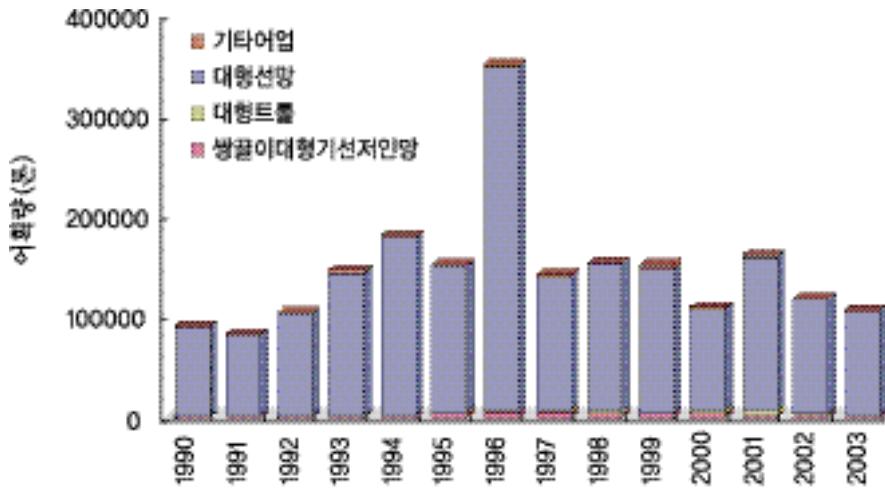
2-129.

1990 2003 , 1990
 (96,984), (90,039), (52,515), (20,078), (15,107),
 (14,604), (13,522) . 1995 (150,814), (84,059
), (32,983), (20,361), (15,012), (11,802), (11,383)
 가 ,
 . 2000 (110,837), (108,512),
 (40,528), (18,258), (16,919), (15,659)
 , 2003 (106,045), (101,701
), (33,543), (26,650), (12,665), (12,430) 2000

2)

, , , , , , (),
 , , , (), , , , 가 , , , , ,

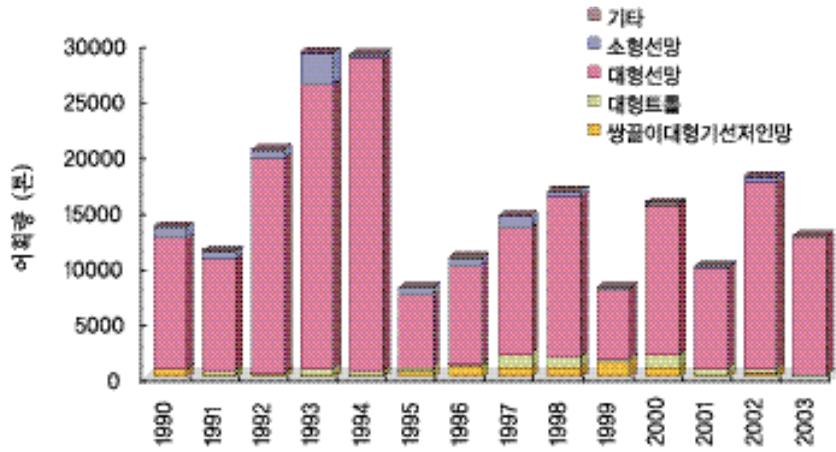
가)



2-130.

1996 351,092 가 , 1991 82,256
 가 . 91~99%가 ,

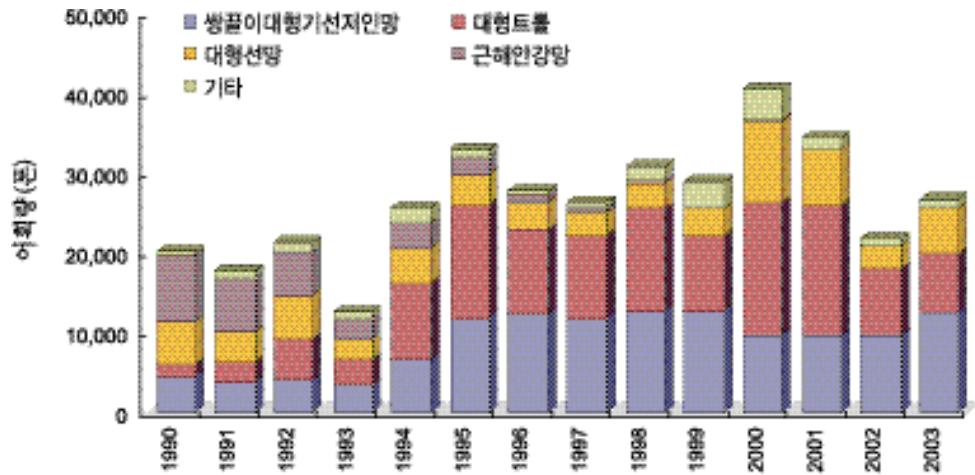
)



2-131.

가 . 1993 29,176 가 , 1999 7,926
76~98%가 ,

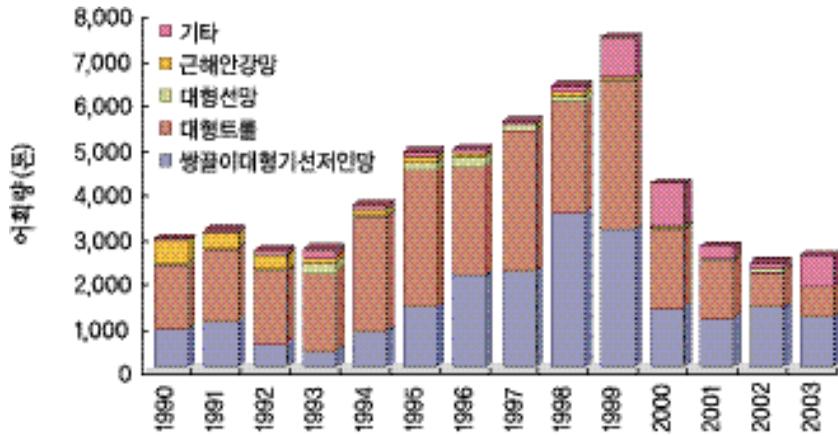
)



2-132.

2000 40,528 가 , 1993
12,458 가 . 1990 41%,
26%, 21%
1991 1996 38%, 25%, 20%, 11%, 6%, 3% ,
1% 1990
21% 2003 46% 가 .

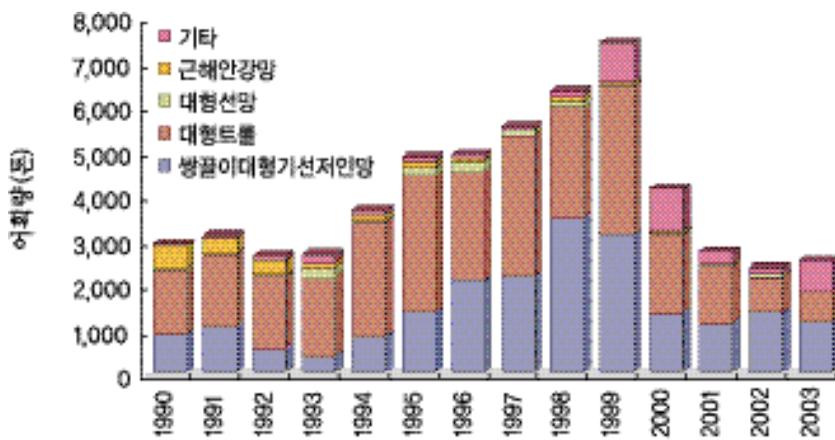
) ()



2-133.

1999 7,358 가 , 2002
 2,321 가 . 1990 50%,
 30%, 17% . 1994
 70% 가 2003 28% .
 1990 가 2002 2003 57%,
 45% .

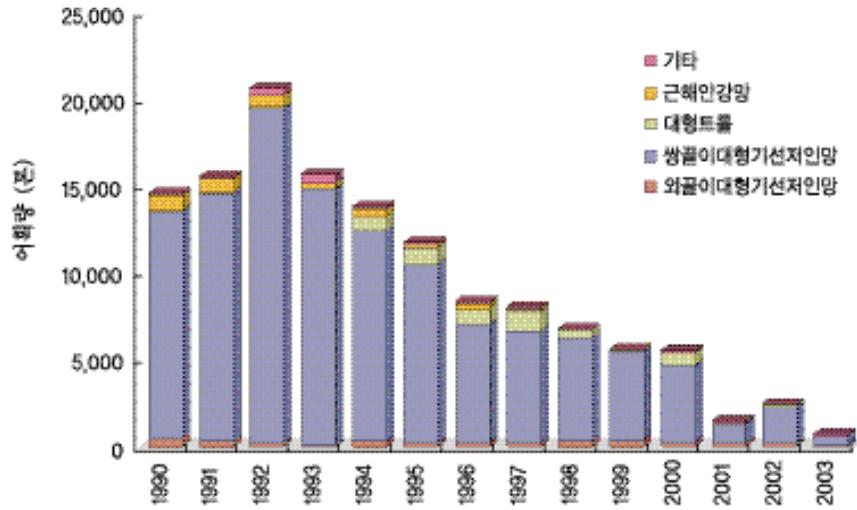
)



2-134.

2003 1,389 가 , 1996 172
 가 . 1990 86%
 , 2003 59%,
 38% 가 .

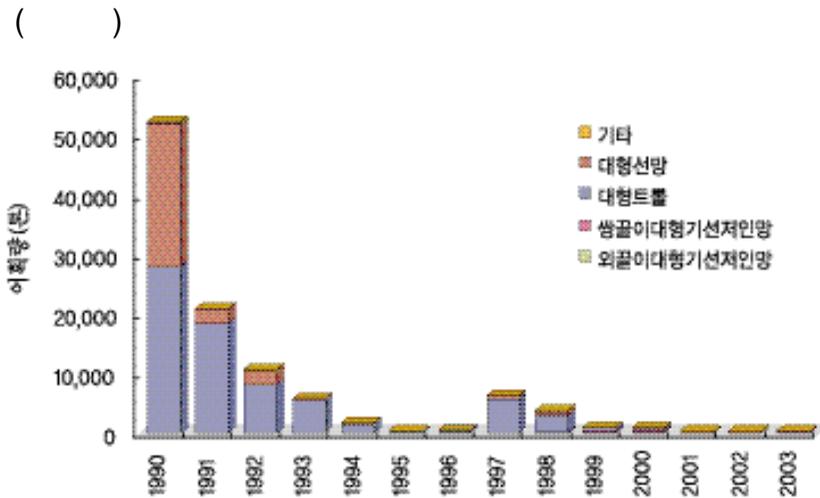
)



2-135.

1992 20,708 가 , 2003
 665 가 , 1990
 89%, 6%, 3%
 2003 84% 가
 1% ,
 13% 가 .

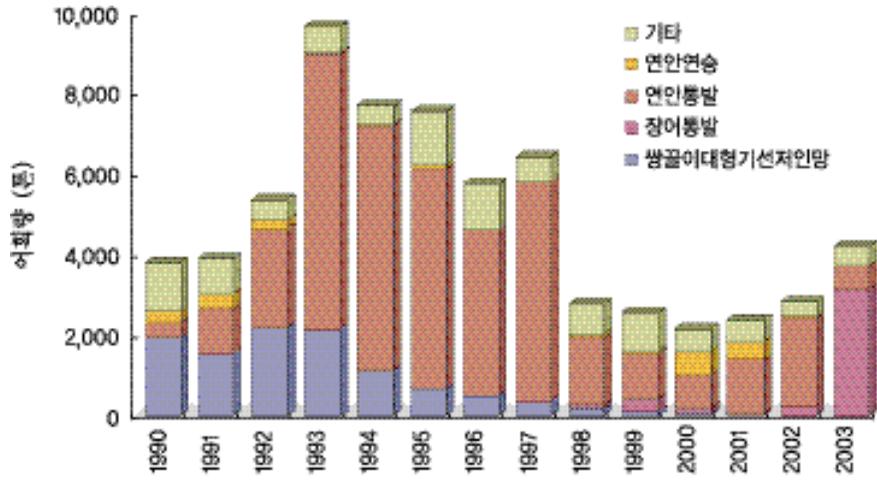
)



2-136.

1990 1990 52,515 가
 , 1995 1996 350 , 522 . 1997
 6,346 300
 . 1990

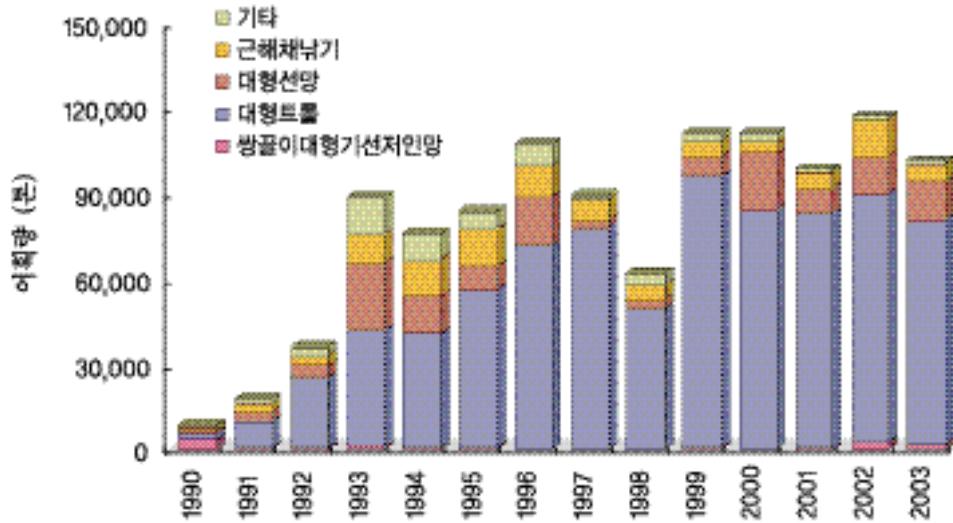
)



2-137.

가 . 1990 . 1993 9,615 가 , 2000 2,139
 6%, 32% . 50%, 11%,
 2001 , 2003
 75%, 14% , ()

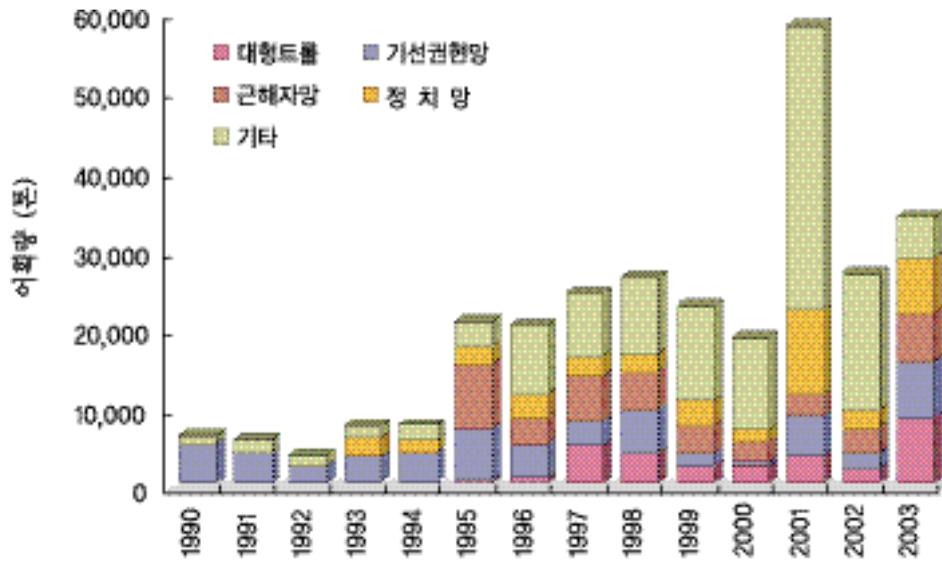
)



2-138.

2002 117,088 가 , 1990
 8,992 가 , 100,000 . 1990
 39%, 24%,
 19%, 9% . 2003 77%,
 13%, 7% 가

)

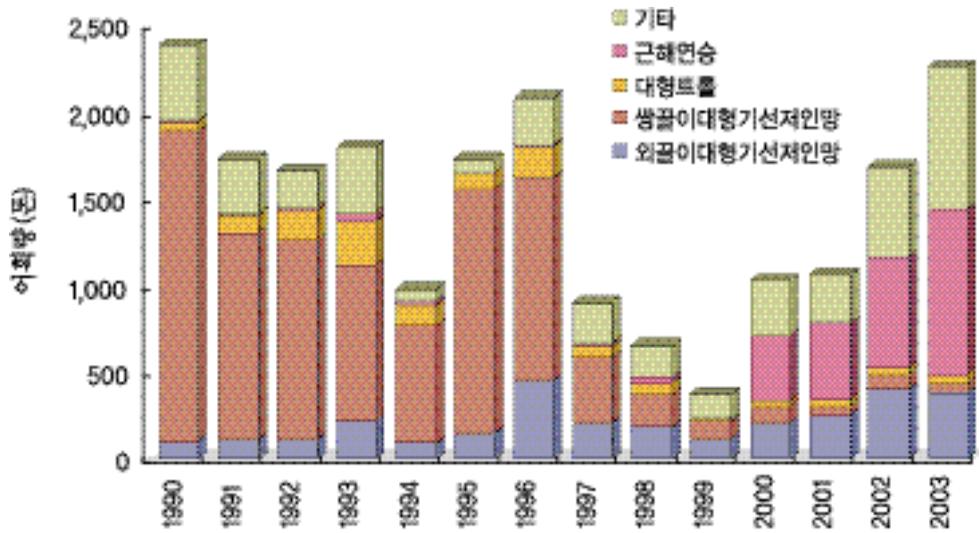


2-139.

1990 2001 57,534 가 ,
 1992 3,452 가 . 1990 84%,
 (,) 16% . 2003 24%,
 21%, 21%, 18%, 15%

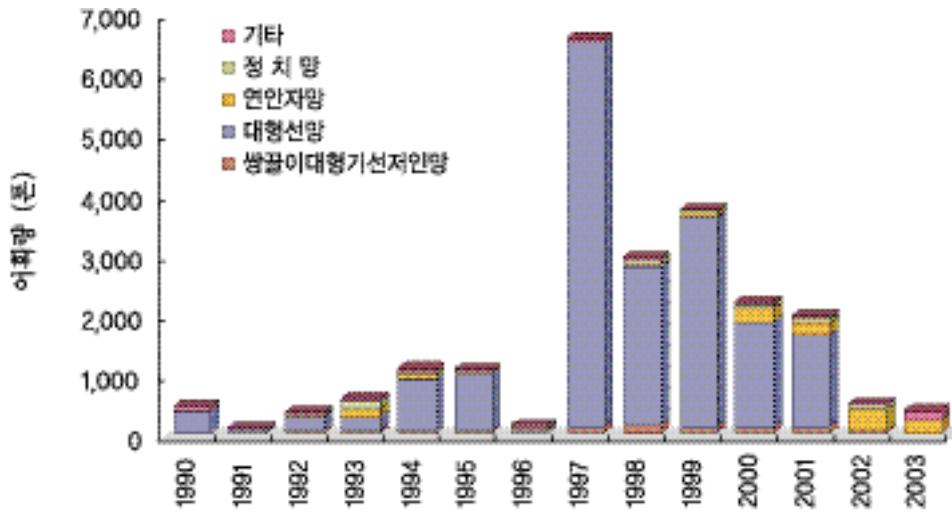
)

1990 2,384 가 , 1999 373
 가 . 1990 75% 가
 2000 10% ,
 가 2003 43% .
 1996 20% .



2-140.

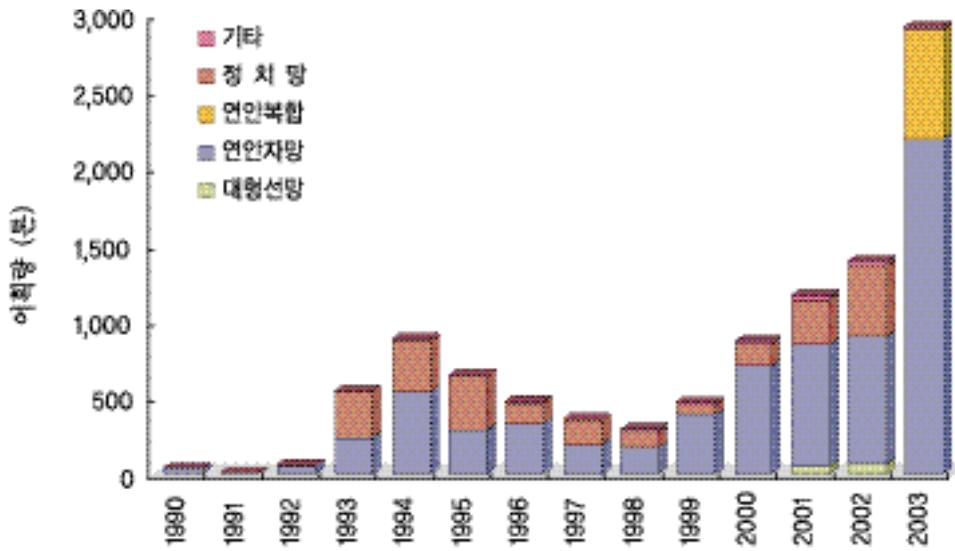
)



2-141.

1990 1997 6,528 가 ,
 1991 69 가 . 1990
 87%, 11% . 2002
 2003
 75%, 61% 가 .

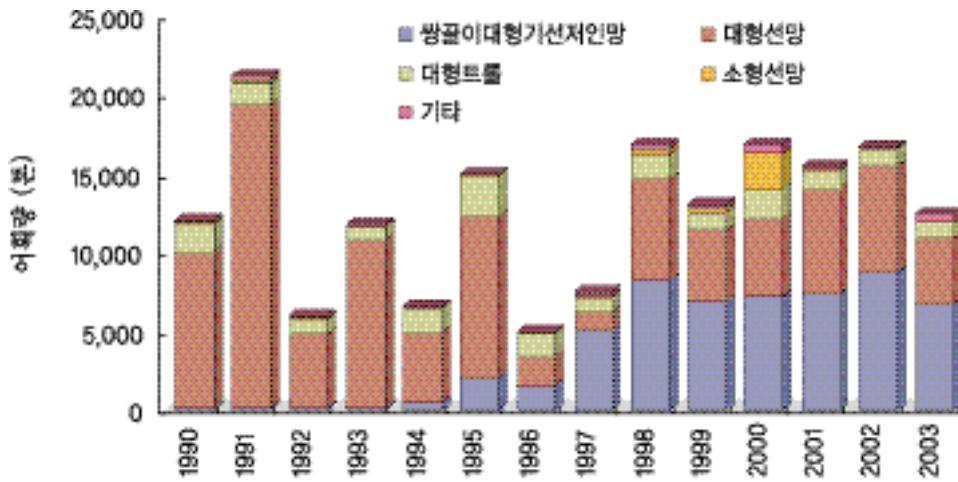
)



2-142.

1990 2003 2,924 가
 , 1991 4 가 2000 가
 . 1990 ~1992
 1993 2002 35%
 2003 75%, 24% 2

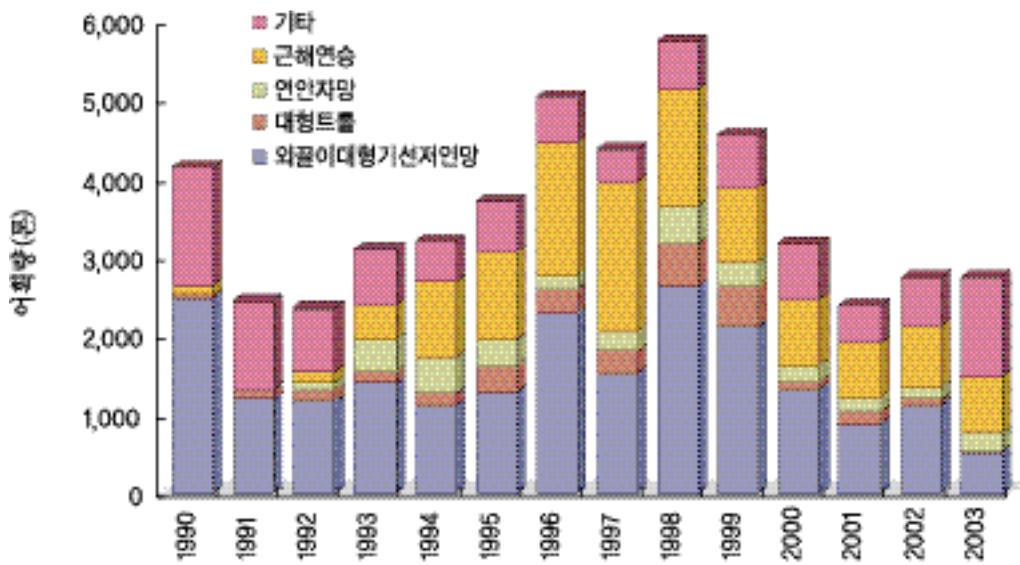
)



2-143.

1990 1991 21,136 가 ,
 1996 4,971 가 2000 2003 가
 12,430~16,919 . 1990 82%,
 15% . 2003 55%,
 34%, 8%
 가 .

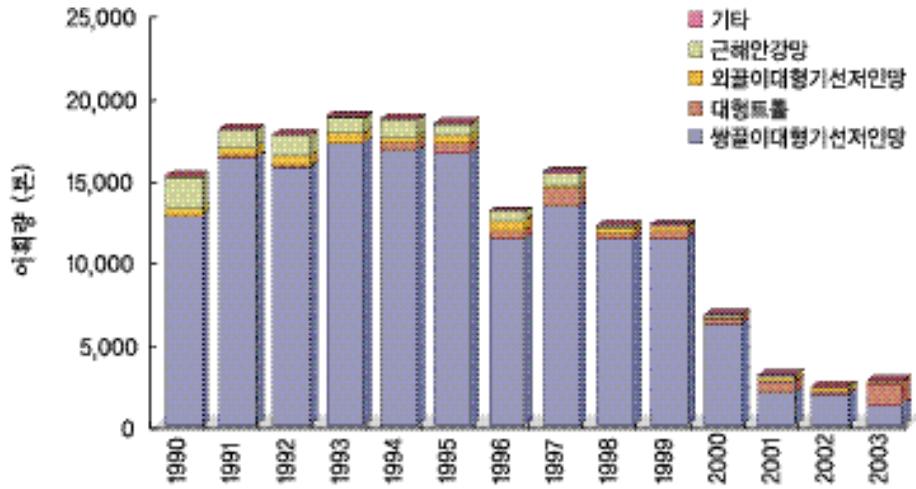
) 가



2-14. 가

가 가 , 가 .
 가 1998 5,726 가 , 1992 2,340 가 .
 1990 가 60% 가
 3% . 1994 20%
 , 1994 2002 2 65~79% 2003
 44% , 가 .

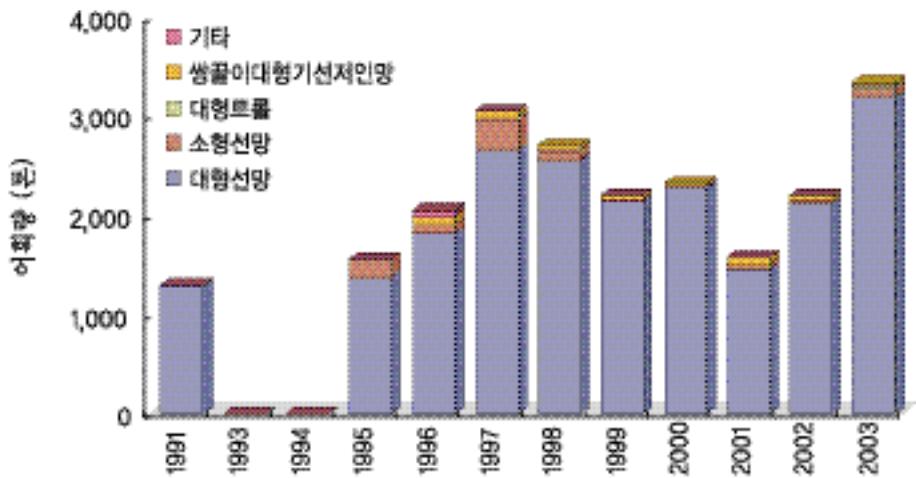
)



2-145.

가 , 2002 2,319 가 , 2000 18,728 가
 . 1990 84%,
 12% , 2000 84~94%
 , 2001 2003
 24%, 14%, 46

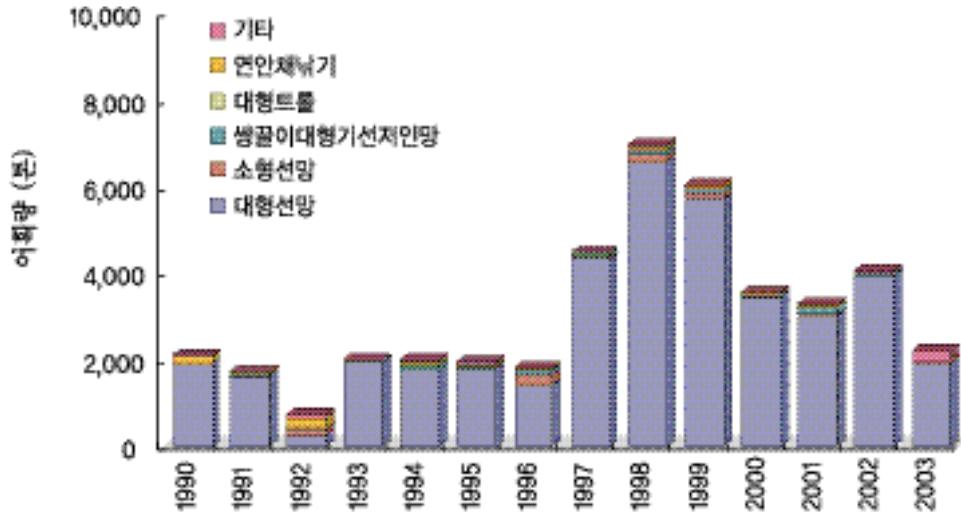
)



2-146.

2003 3,327 가 , 1993 1994
 88~100%

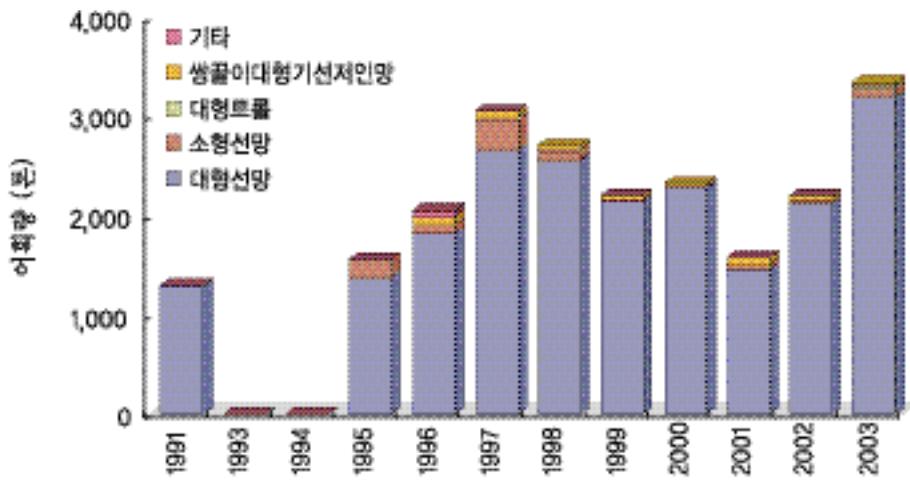
)



2-147.

1990 1998 6,975 가 ,
 1992 719 가 , 2000 2003 2,209~4,037
 . 1990 89%,
 8% 1990 2003 1992
 78~97% .

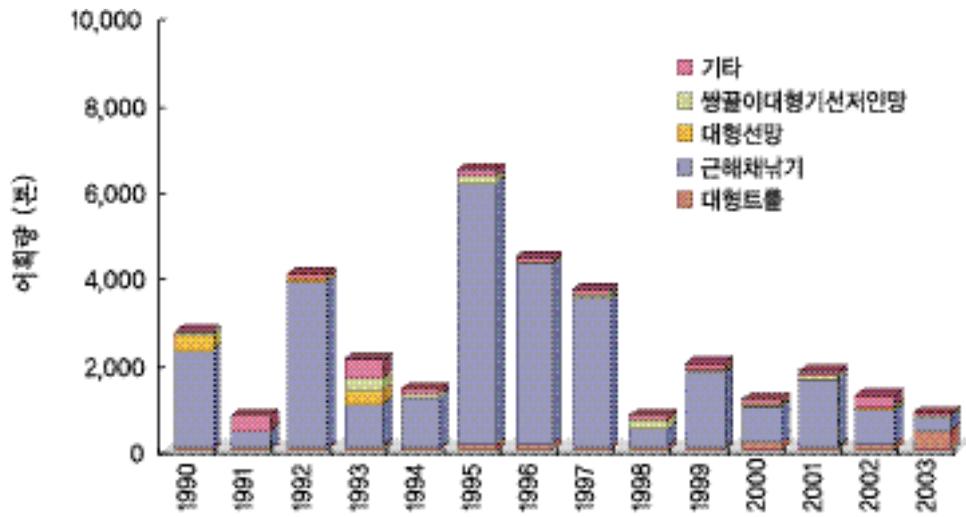
)



2-148.

1990 1998 913 가 ,
 2003 104 가 . 1990 22%,
 17%, 15% .
 , 2003 () 46%,
 28%, 13%, 5% .

)



2-149.

1990 1995 6,456 가
 , 1991 772 가 . 1990 84%,
 11% . 2002 가
 , 2003 53% ,
 32% .

가 가			吳	吳 吳		吳 吳 吳
	吳	吳 吳	吳		吳	
		吳	吳			

(吳 : , :)

2)

가

3-2.

가			吳		吳		吳		吳
	吳				吳				吳
						吳		吳	
	吳				吳				吳
		吳		吳	吳				吳
			吳						吳

(吳 : , :)

1)

3-3.

		()	()	()		
					,	
	가 , , , , ,	(10~5)	45~100	12~13	40mm	1
	, , , , ,	(:4~7)	80~140	12~14	50mm	1
	, , , , ,	(:4~7)	140	14~16	50mm	1
	, , , , ,	(9~2)	100~150 35~60 150~250	25~30 6~8 8~10	30mm	1
	, , , , ,	7~3	8	5~8	30mm	1
		(8~12)	20~40	5~8	30 /1	14 ()
		7~1 (8~11)	50~70 15~25 가 60~100 30~50	10~15 2~3 14~16 3~4	140	1
	, , , , ,	3~6 8~12	10~70	3~6	35~303mm	2~14
	, , , , ,	3~6 9~11	5~8	4~6	, ,	1~2
	, , , , ,		30~60	8~12	32mm	2 (2,000 /)
			60~70	7~10	6~9mm	1 (12,000~ 15,000 /)
	, , , , ,가 ,		10~15	5~7	200 /	2 (70~80)

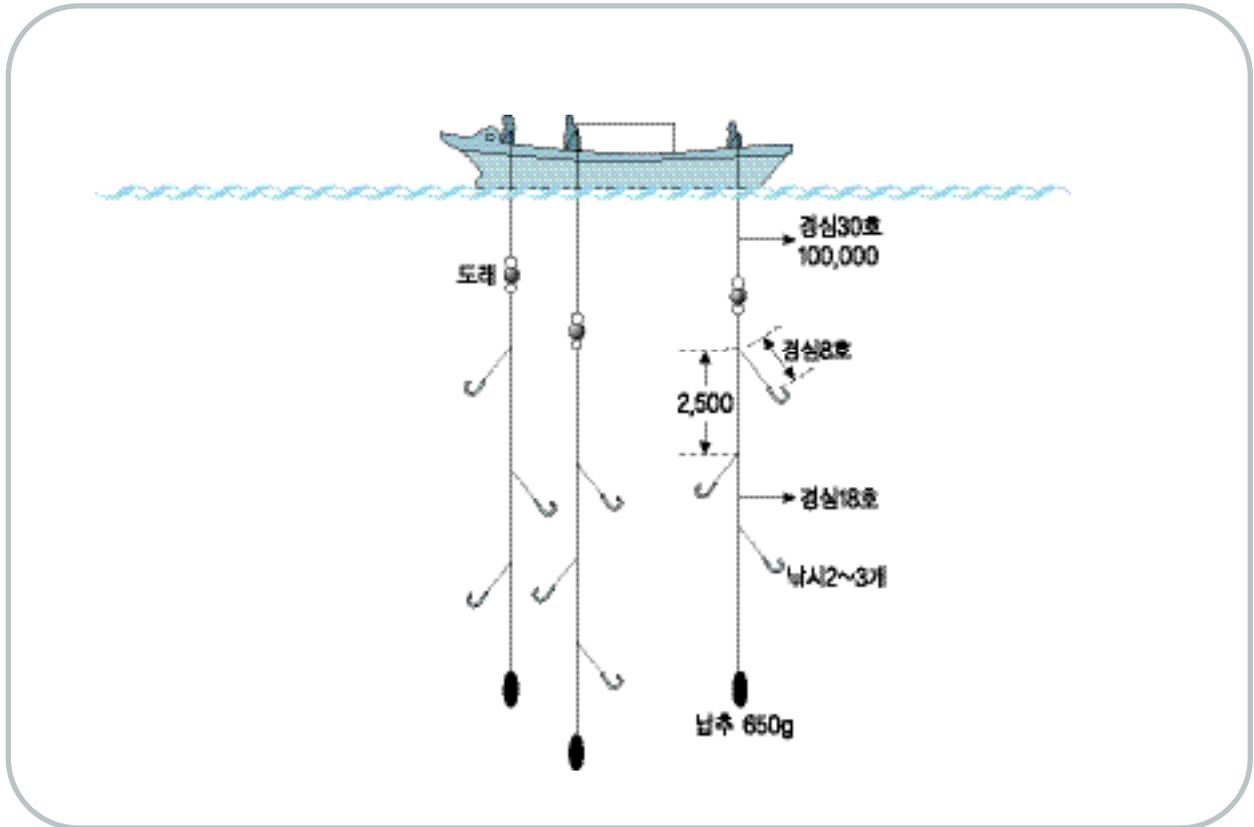
2)

3-4.

		()	()	()		
					,	
	,	3~1	1~4	2~3	2~3 /	1 /
	, ,	4~11	2~4	1~2	1 /	8
		7~11	5~7	5~7	15~20 /	2 /
	, ,		2~7	3~6	200 /	5~30
(1)	,		2~7	2~3	6~9mm	10 (150 /)
(2)	, ,		1~2	2~3	13mm	1~2 (200 /)
(3)	, ,		2~4	2~3	27mm	10 (30 /)
		3~6 9~12	5~8	6~8	18~24mm	1 (15~20)
	가 , , ,		4~7	3~4	110~120mm	1 (5~10)
		3~6 9~12	1~3	2~3	120	1
	' , ' , ' , ' , , 가		1~3	2	36mm	1

3)

가)



: 8~1 , 3~1

: 40~50m, ,

: , , , 30%

: , , ,

:

30 ,
2.5m 8 10 , 1m 2 3 . 1

T , 가 가

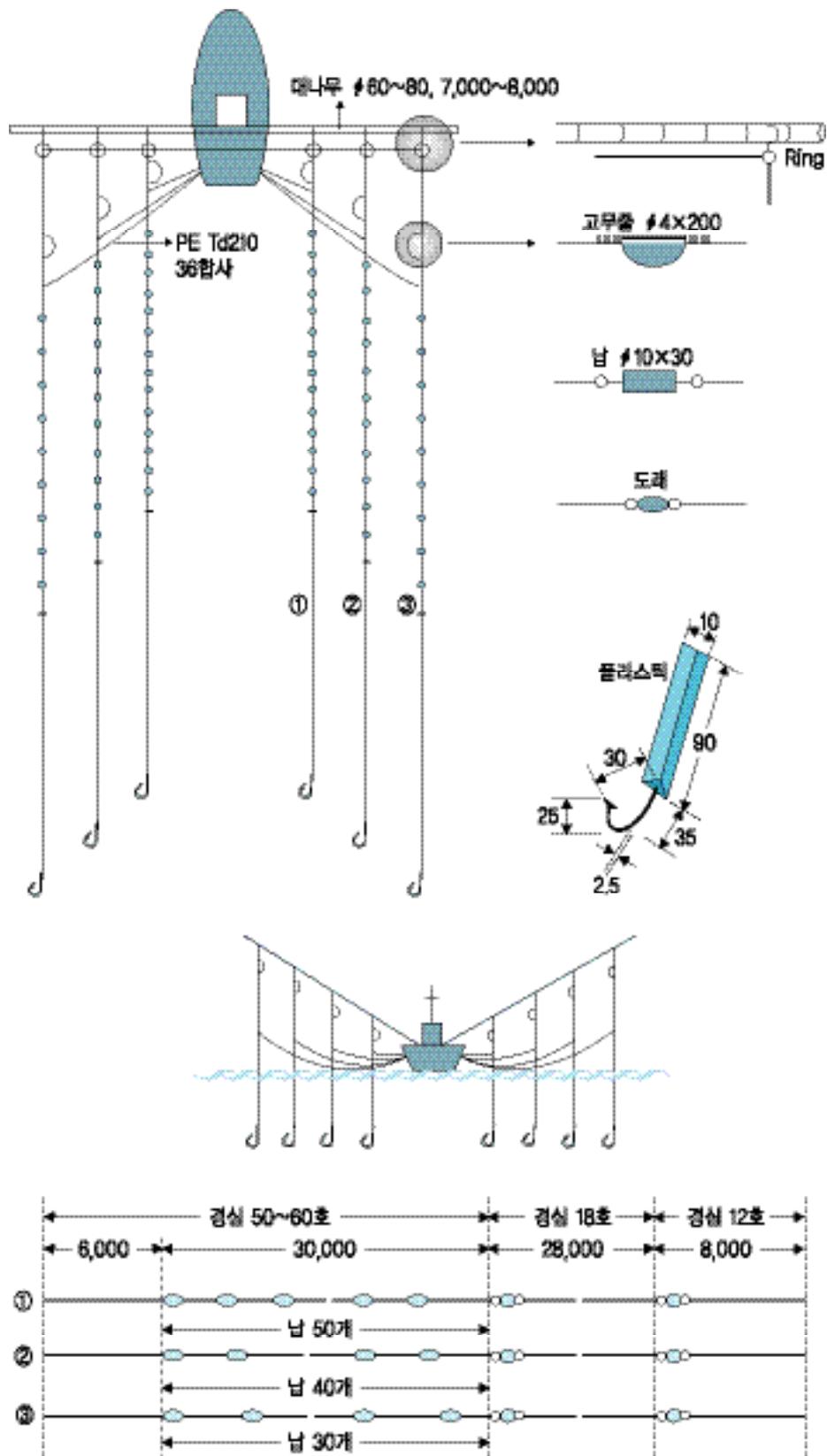
1m 600g .

4 5 . 가 가

가

. 가

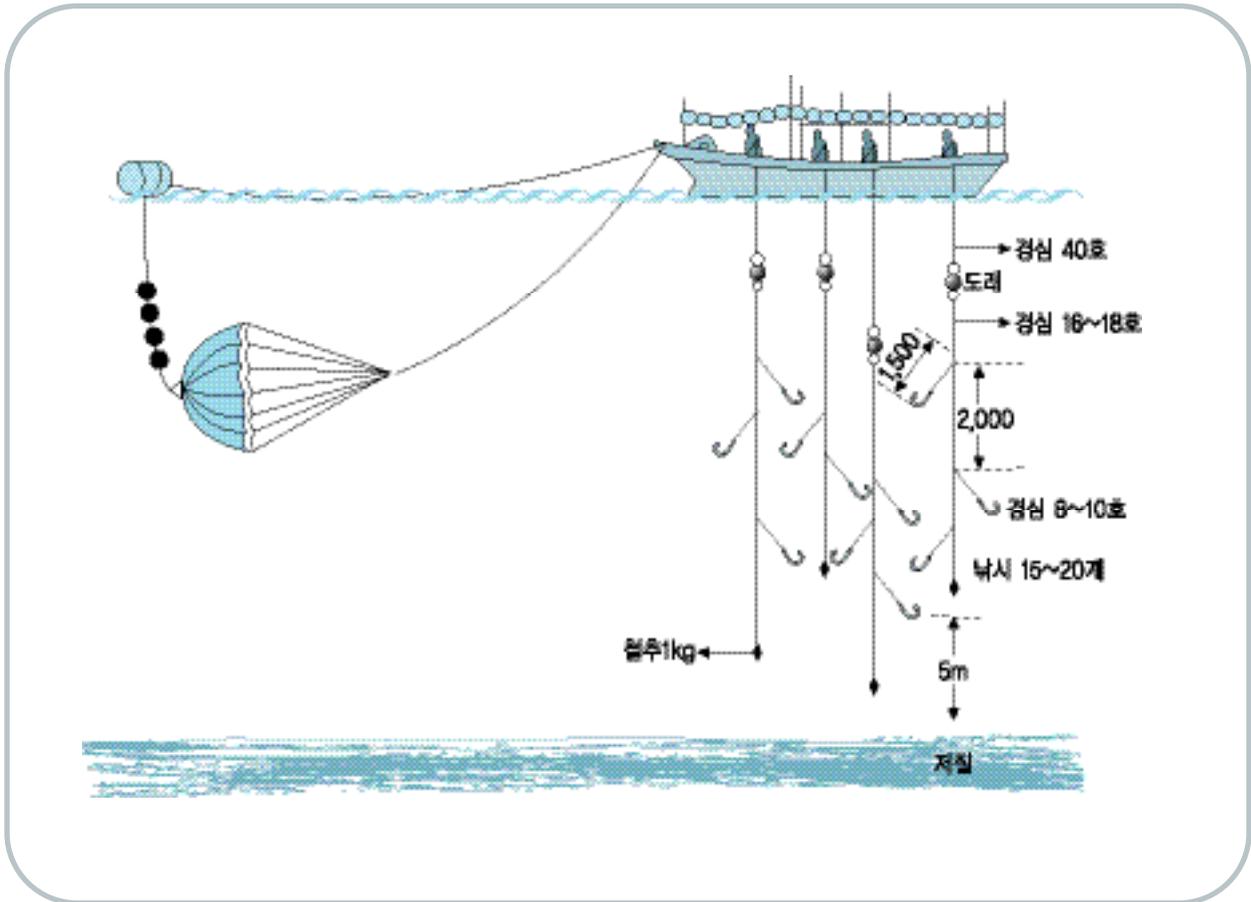
)



: 4~11 , ,
 : 40~50m, ,
 : , ,가 , 30%
 :

3 4
 1 . 가
 , .
 50 , 16 20
 4 .
 5 6 5 6 ,
 , .
 . 가 ,
 5 6 , 15m
 .

)



: 7~11

: 70 80m,

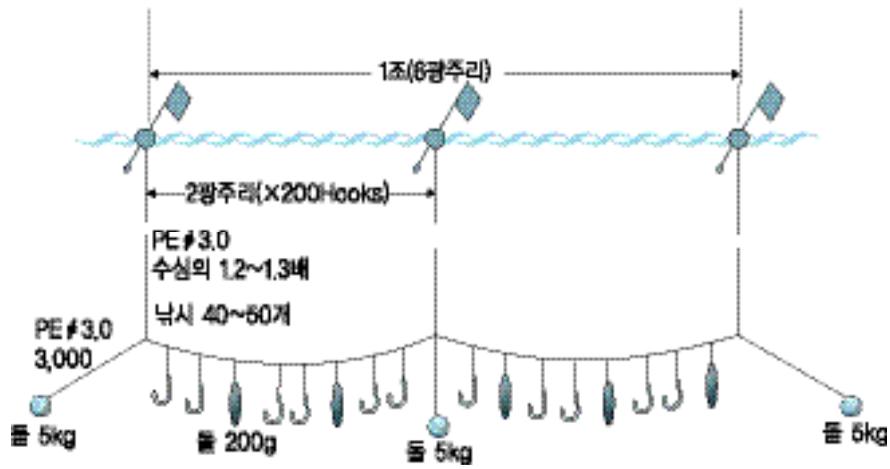
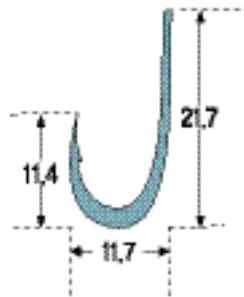
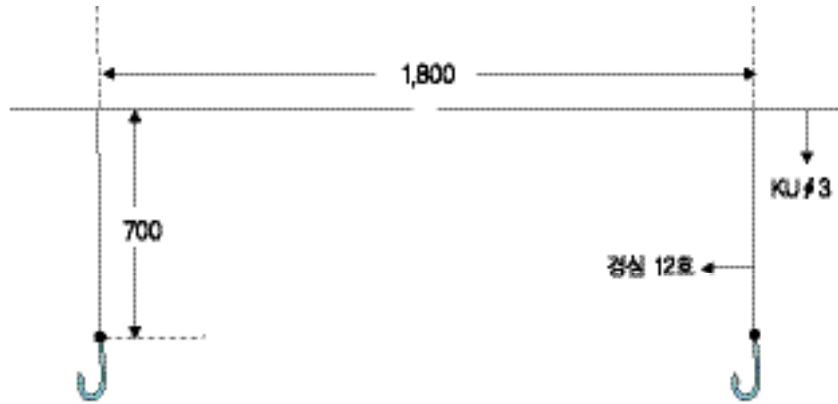
:

: ,

:

10 40 2m 8
 1.5m . 15 20
 1kg . .
 가 . 가 1.5kW
 60 . .1
 2 ,
 3 4m .

)



: , 9 5

: 50~100m,

: 90%, , ,

: ,

:

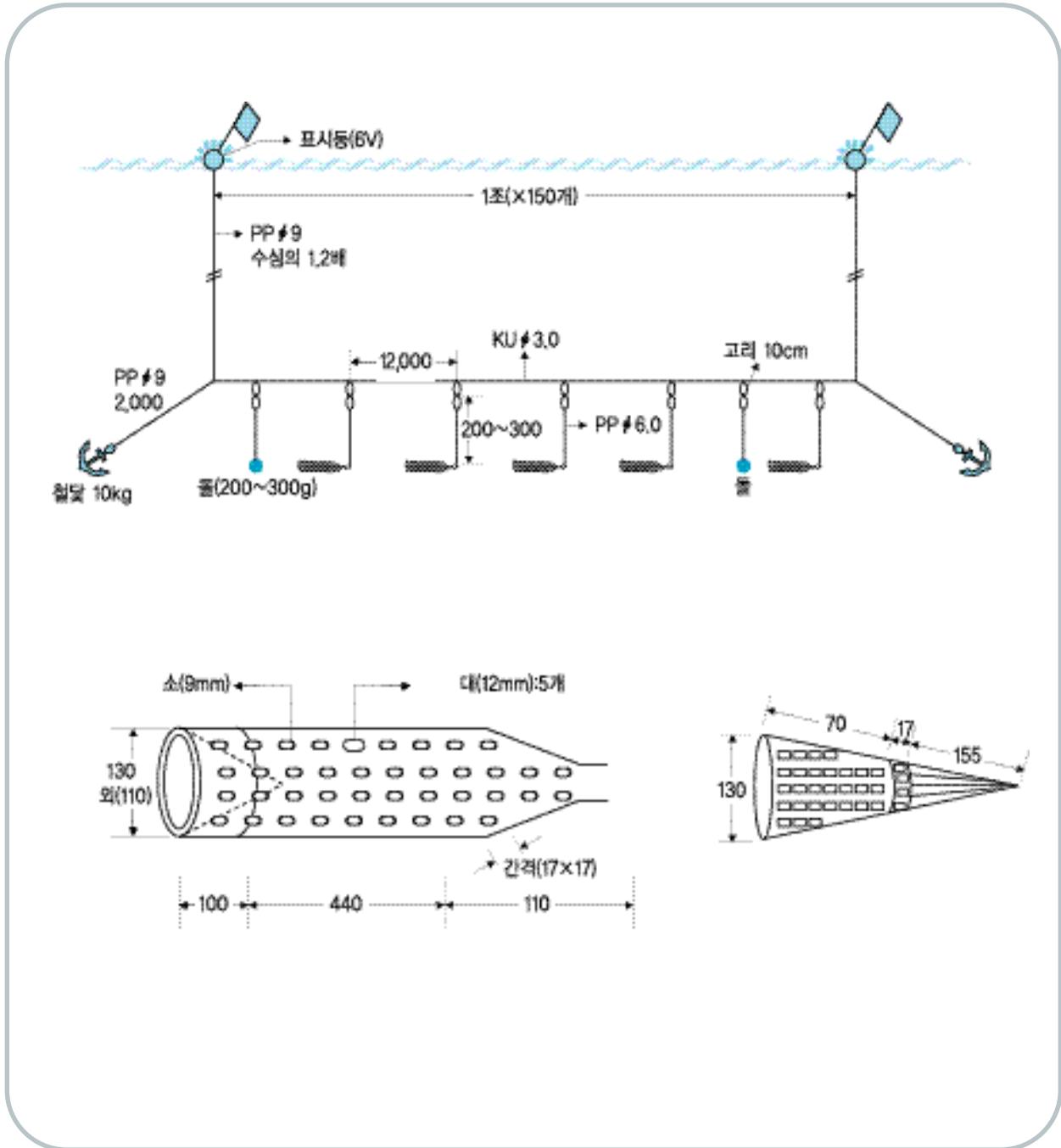
KU 3mm , 12 ,
1m 1 200 .

, . 40 50 200g 2 ,
4 6 1 가

. 1 1 1 2 ,

3 4 .

)
(1)



:

: 20m ,

: 가 90%, 10%

: , ,

:

4 5 ,

6 24

,

,

8

1,000

1,500

6m

12m

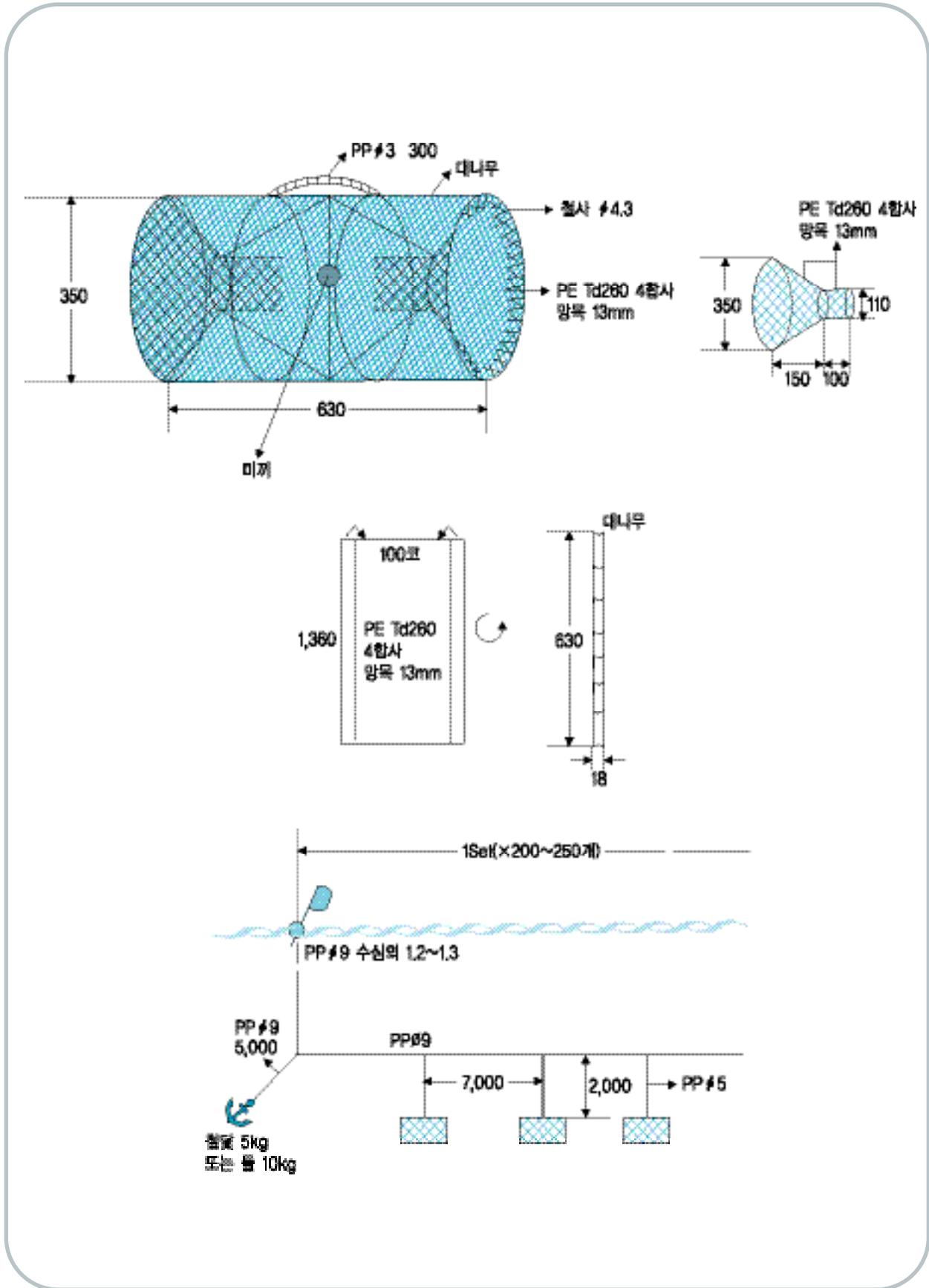
10m

,

100 200

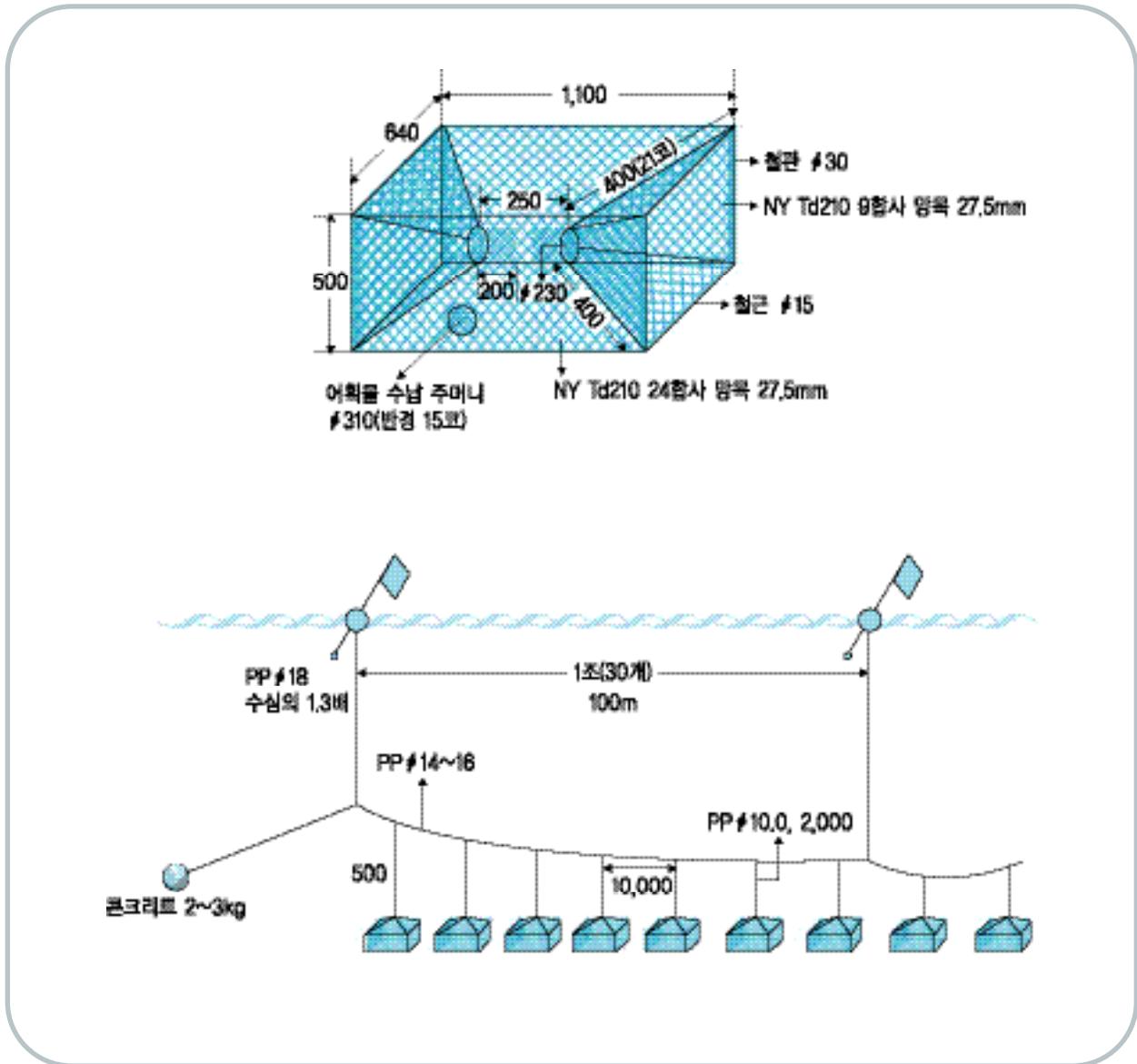
1

(2)



:
 : 20m ,
 : , , ,
 : , ,
 :
 4.0 350mm
 , PE Td240 4 13mm , .
 100mm 2 , 5 6
 , 1 2 ,
 , 가 .
 FRP 1~2 2~3 5 6
 . 200 250 1 1 2 1
 40 50 , 1 30 2 .

(3)



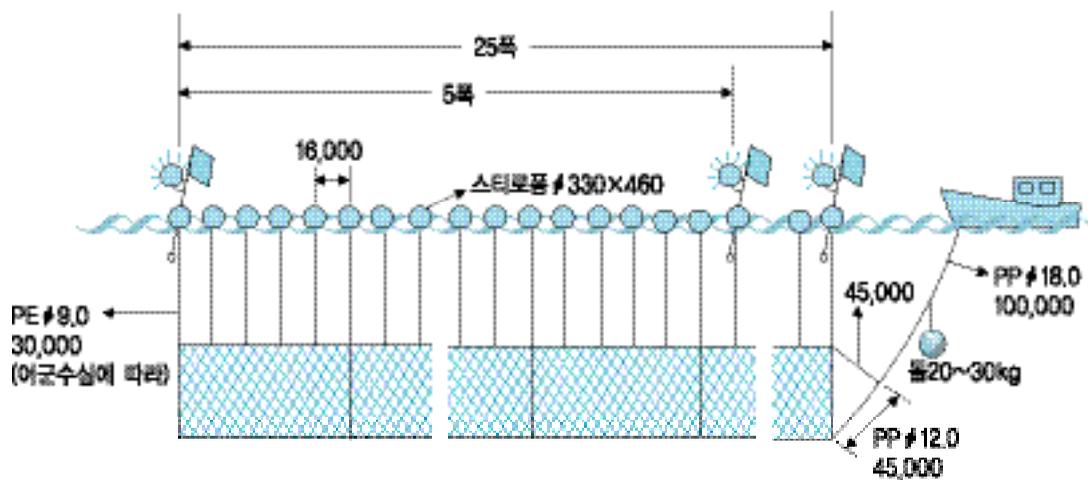
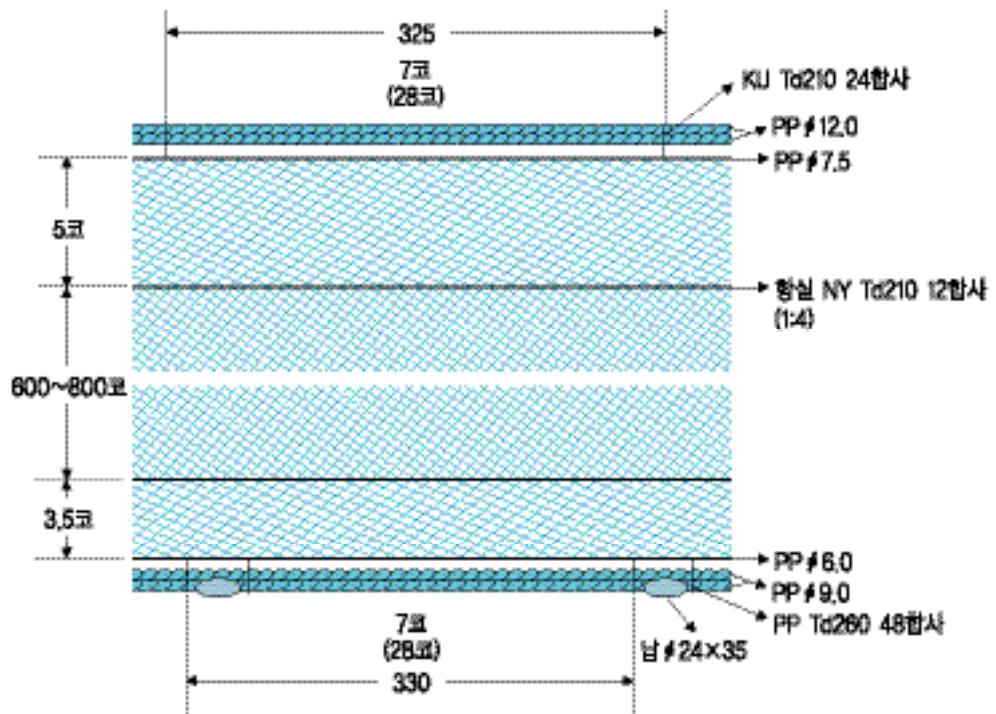
:
 : 40~60m ,
 : , ,
 : , ,
 :
 30mm 15mm
 Td210 9 27mm 2
 50mm 가 4
 가 가
 30 1 20 30
 1 10
 , 1 . 1
 20 , 1 .

)

PP #12.0 81,250

5코	Knot NY Td210 39합사 망목 75.7mm	132,500
600~800코	Knot NY Td210 3합사 망목 21.6mm (망목 18.9~24.2mm)	151,500
3.5코	Knot NY Td210 39합사 망목 75.7mm	132,500

PP #9.0 82,500



: 3~6 , 9~12

: 50~200m

:

:

	NY Td210 3	19 24mm	,
51 54%,	55%	가	2 8%

.

. , 가 30m 가

, 가

, 1 5 6 .

1 15 20 ,

.

3 4 가 , .

, 10cm, 5 6m

.

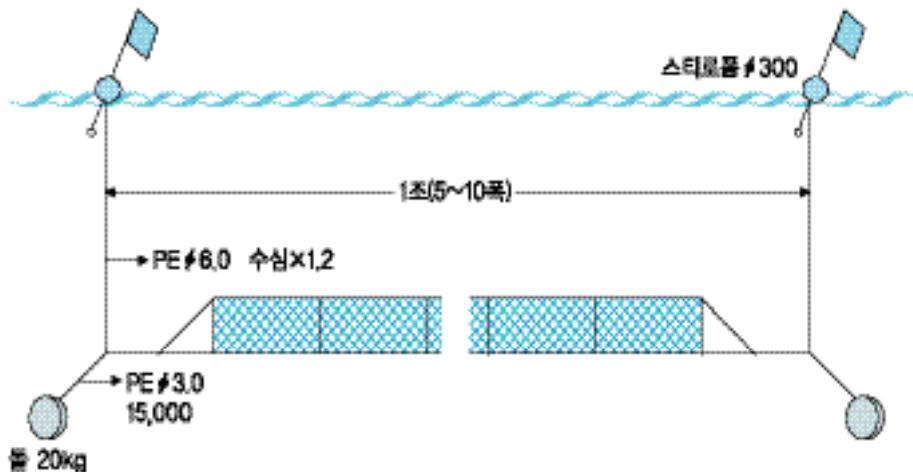
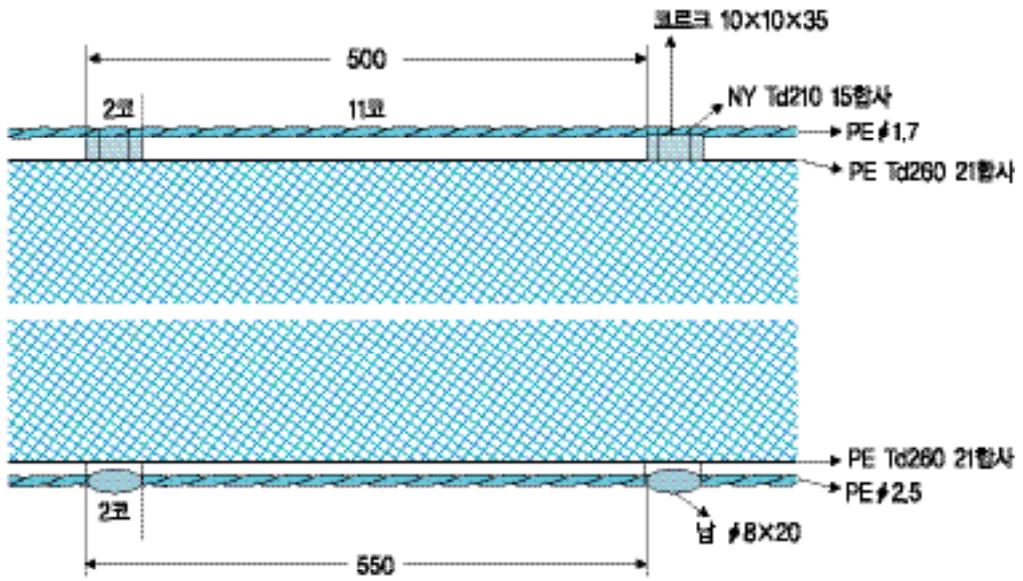
. 1 30 , 2 3 , 1 2

) 가

PE #1.7 115,200

20코	Knot NY Td210 3합사 망목 121.2mm	303,000
-----	------------------------------	---------

PE #2.5 105,800



: 가 , 6~2

: 150~200m,

: 가 60%, , ,

:

NY Td210 3

110~120mm

38%,

35%

FRP

4 7

50 200

3 4

1

10 20

5 10

1

1

5 6

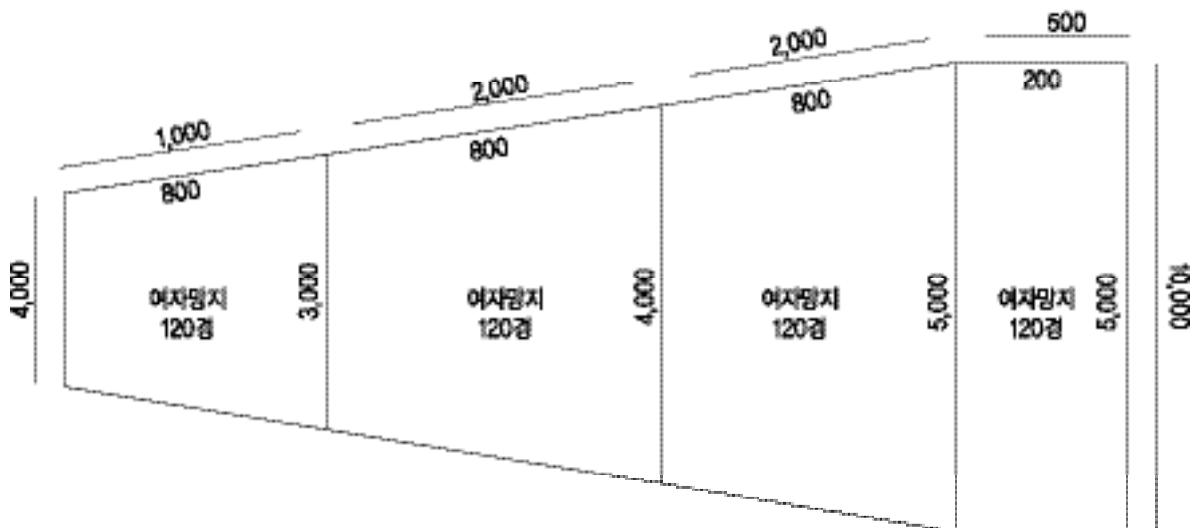
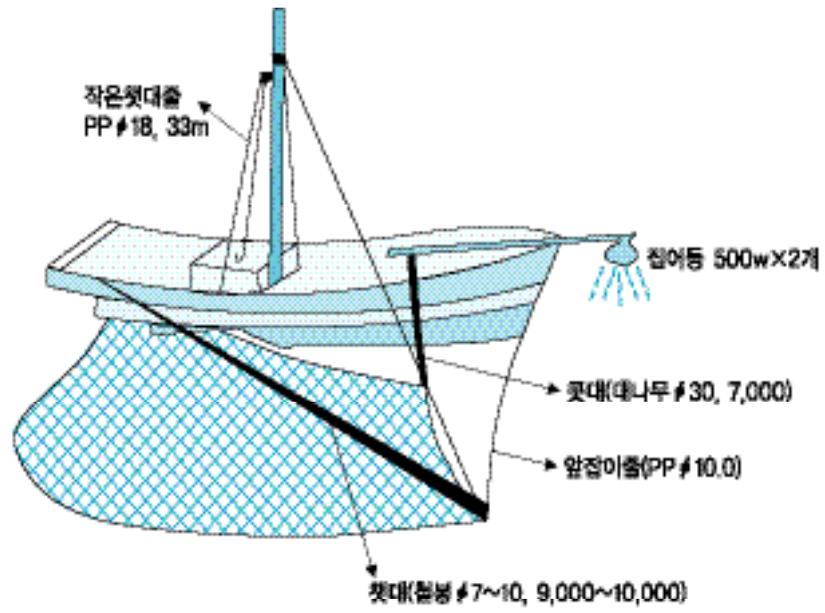
20 30 ,

1

1

30

)



: 3~6 , 9~12

: 15~25m

:

:

,

120 ~160

가

가

1

, 가

. 2

3kg

3

가

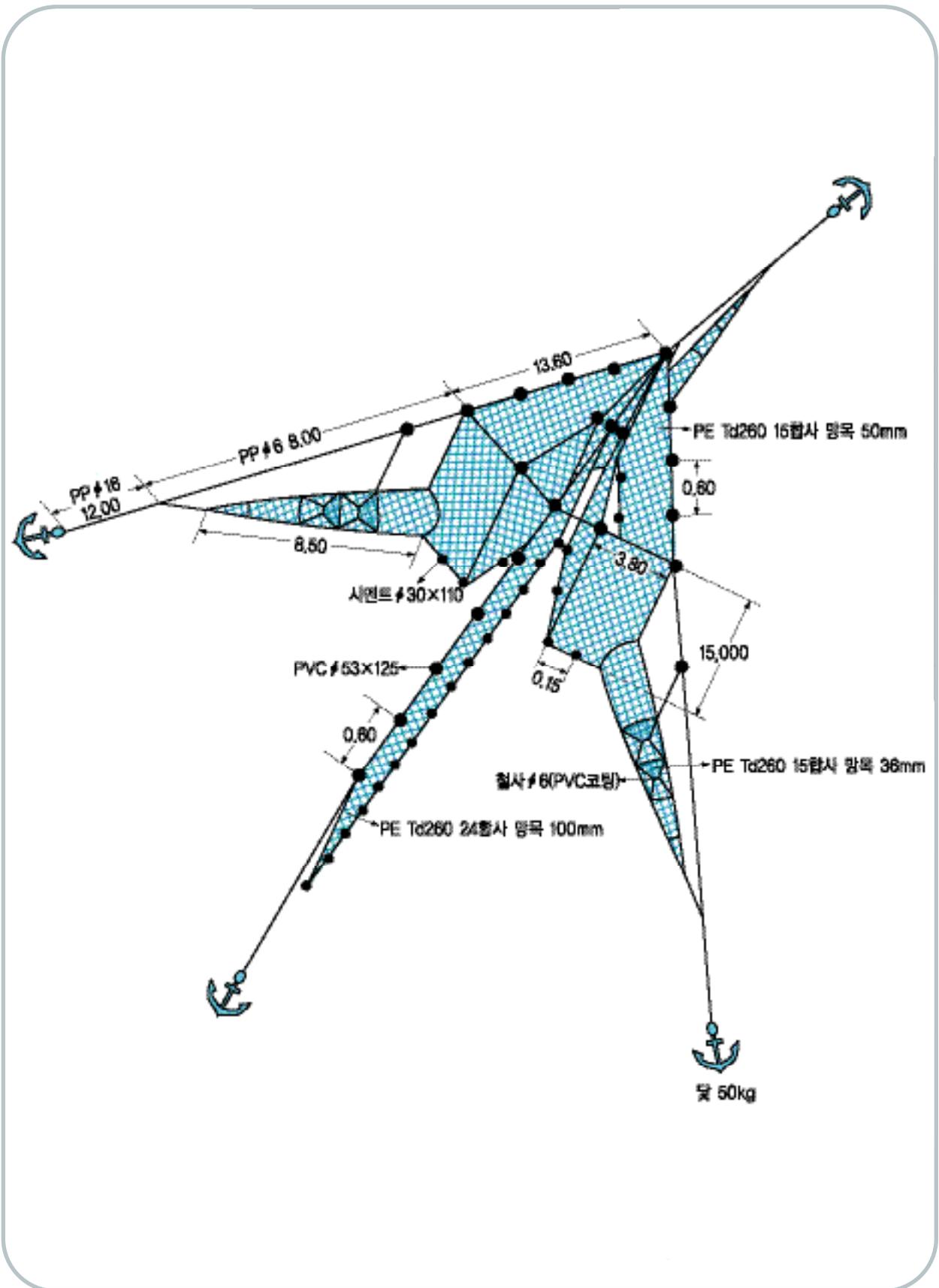
. 1 7~8

10 ,

2

.

)



: 4~6

: 15~25m

: , , , , , 가

:

2 1

가 , .

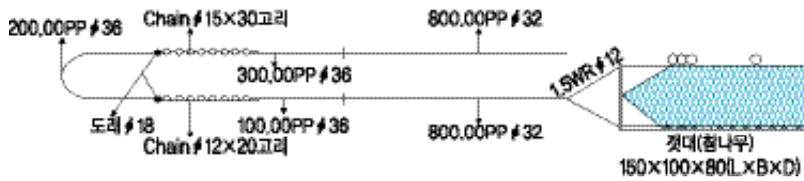
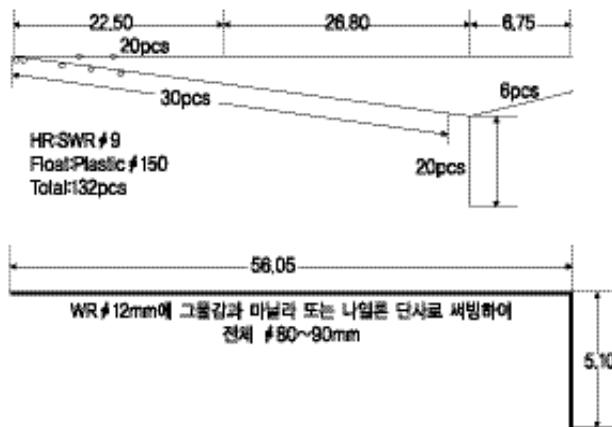
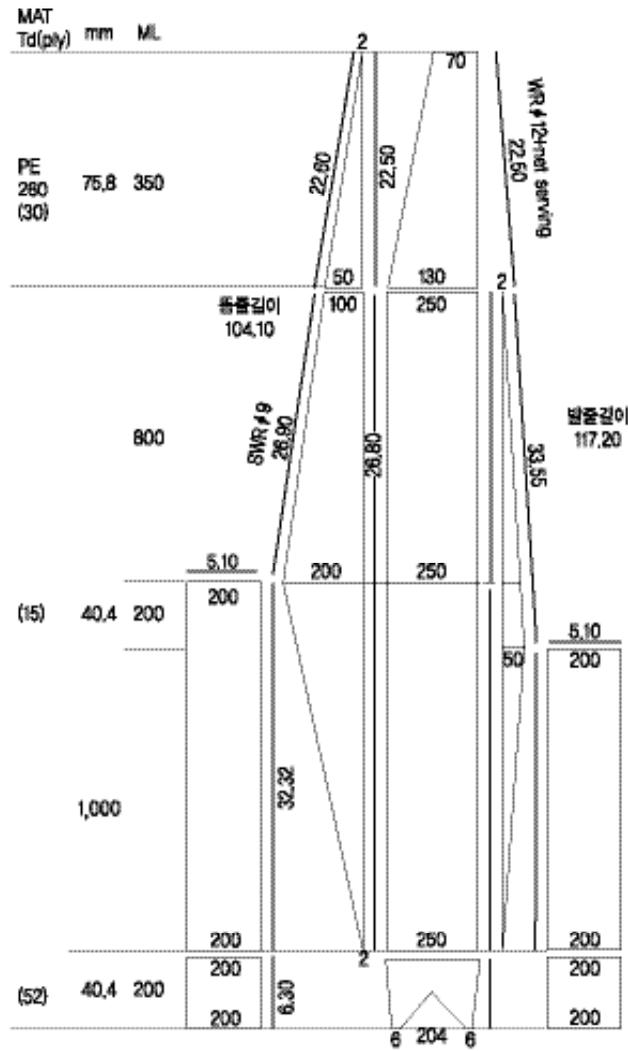
121.2mm

, 60.6mm .

12~15m , 9~11m , 1 1 ,

1 1 .

)



: 가 , 10~5

: 40~200m

:가 , , , , ,

:

40 100

350 650

12 13

1

가 .

가

150

가

90

30

90

가

가

10 15

가

가

180

가

가

가

1.5

2

,1

50 60

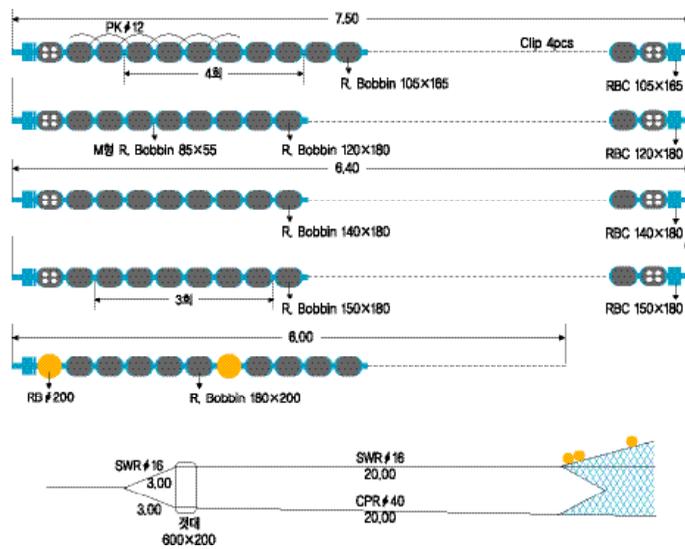
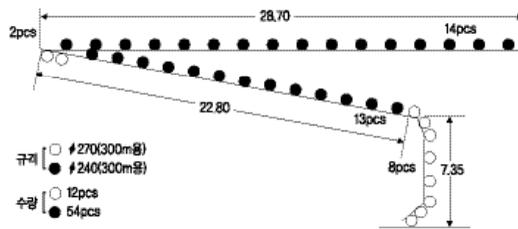
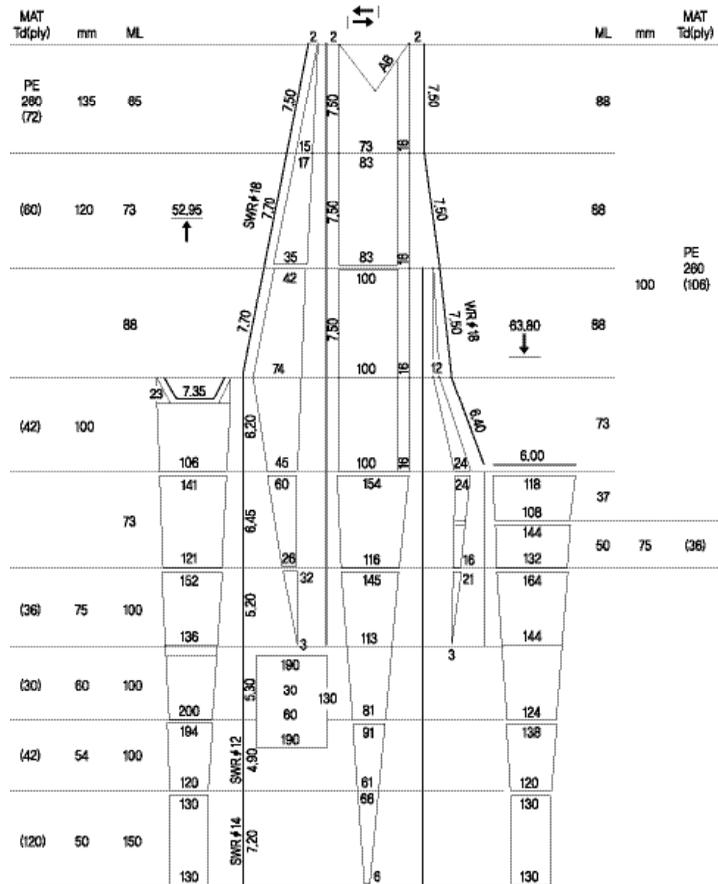
1 10

,1

가

1

)



: , 4 7 2 3

: . 50 150m,

: , , , , , ,가 , ,가

:

80 140 , 500 1,800 12 14

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. 가 가가

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가

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V U

(

400 600m)

2 3

2 3kt

5 10

,

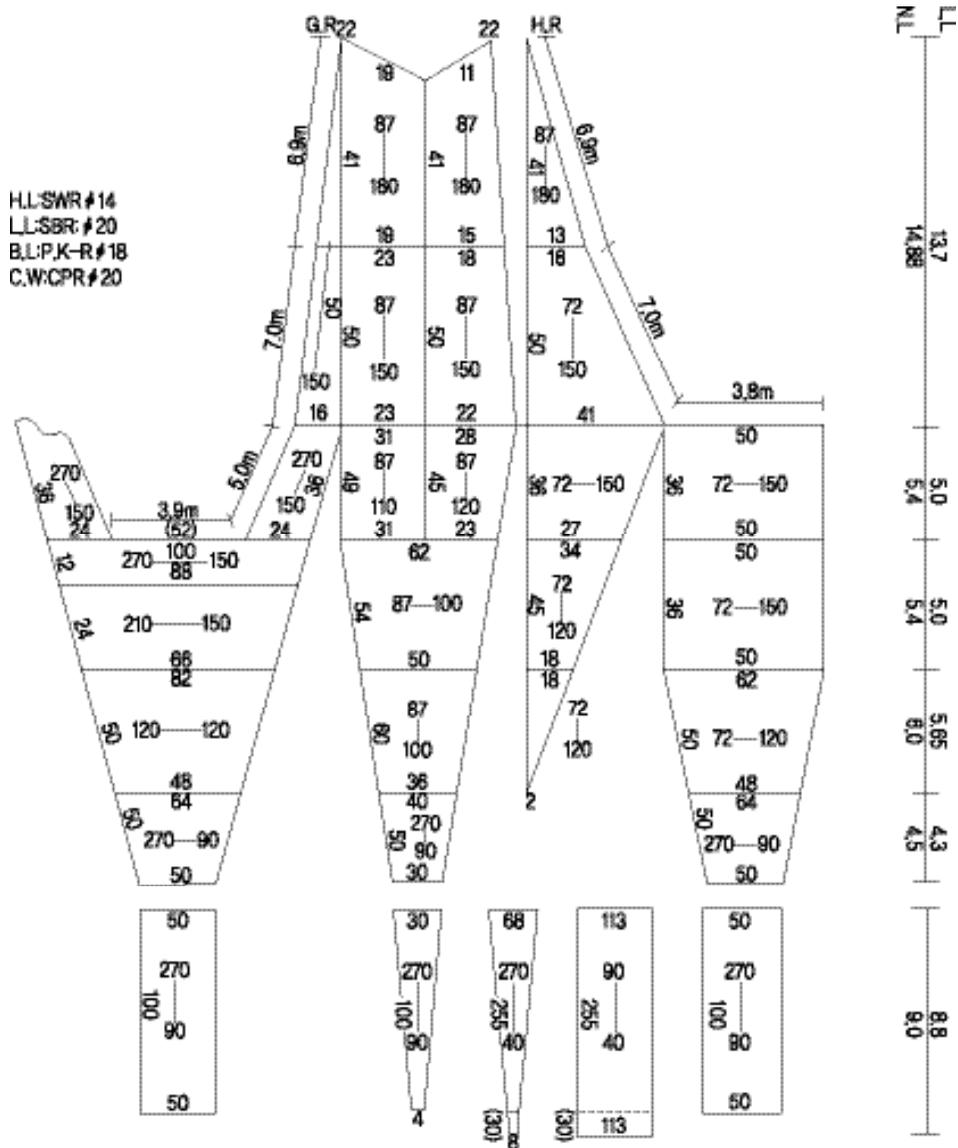
, 가

.

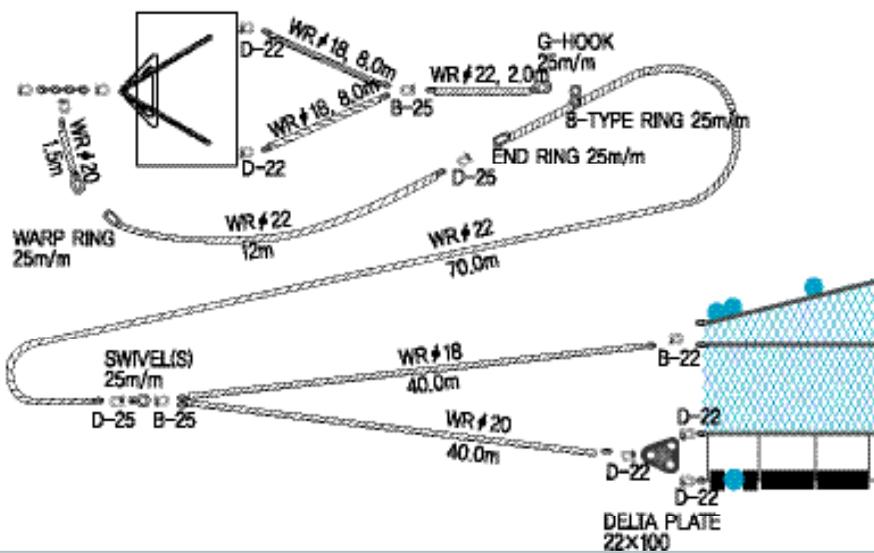
1 4 ,1

20

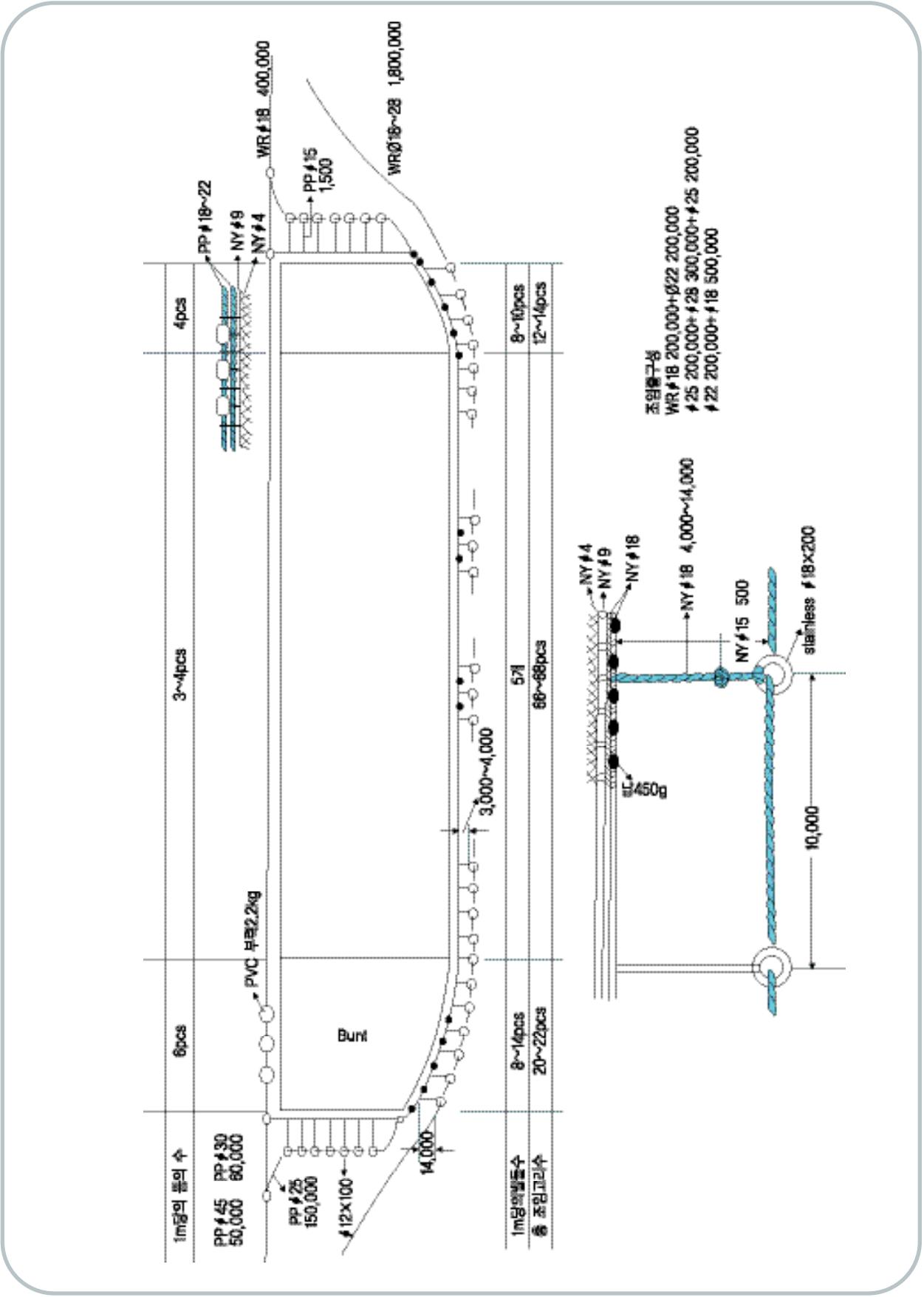
)



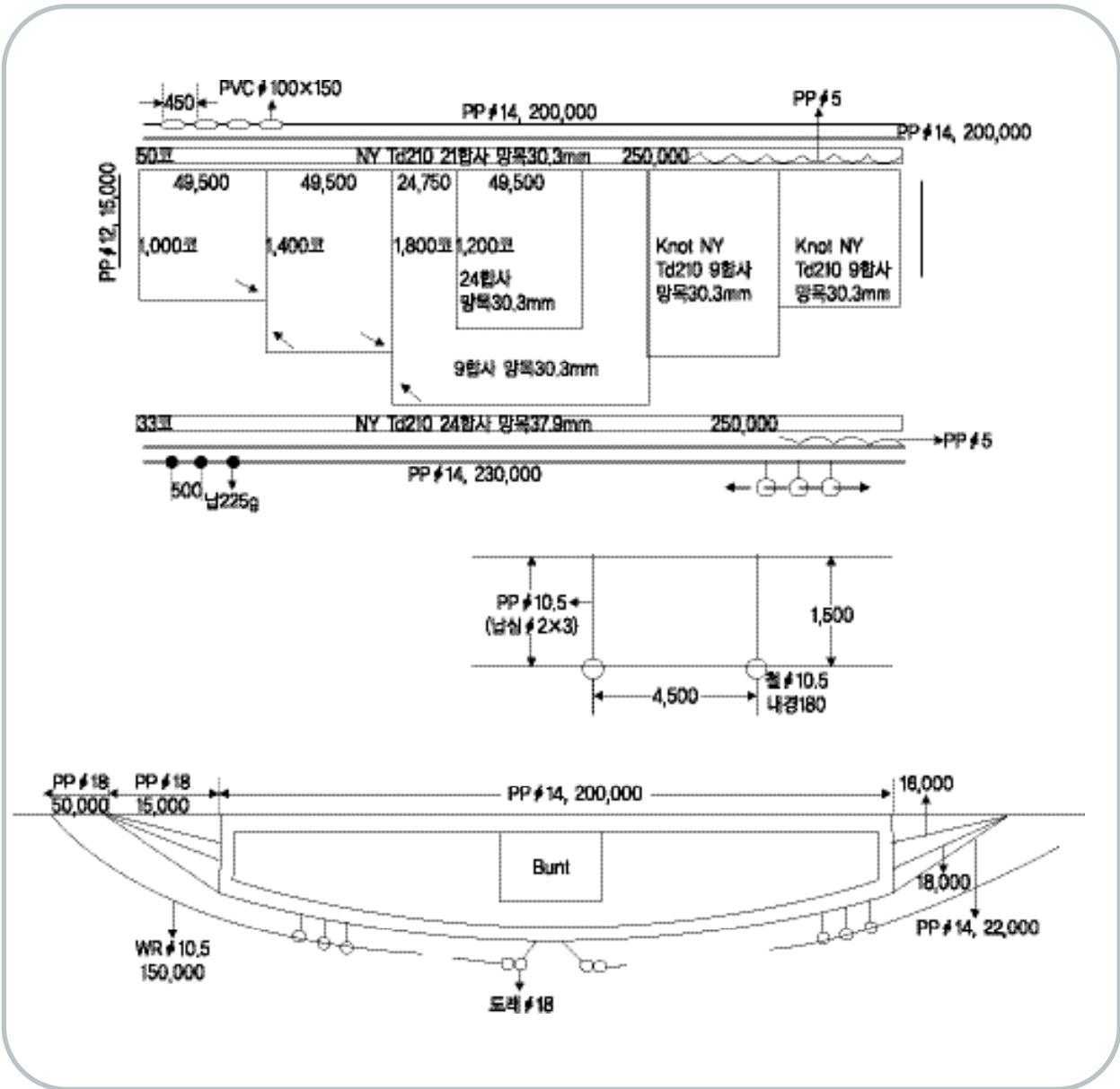
NET PENDANT & HAND ROPE



: , 4 7 2 3
 : 50 150m,
 : , , , , , ,
 :
 140 14~16
 .
 . 가
 , , , . 가
 ,
 . 가
 . 100m 4 , 100m
 3 , 100m 2 2.5
 . 가 ,
 , 2 3 , 1 2
 . 10
 .
 , 1 1 5 6
 20 .



)



: 7~3 , 8 10

: 15~30m,

:

:

:

NY Td210 9 24 30 35mm

67% , 77% , 50%

FRP 8 , 250 5~8

가

3 1

가 ,

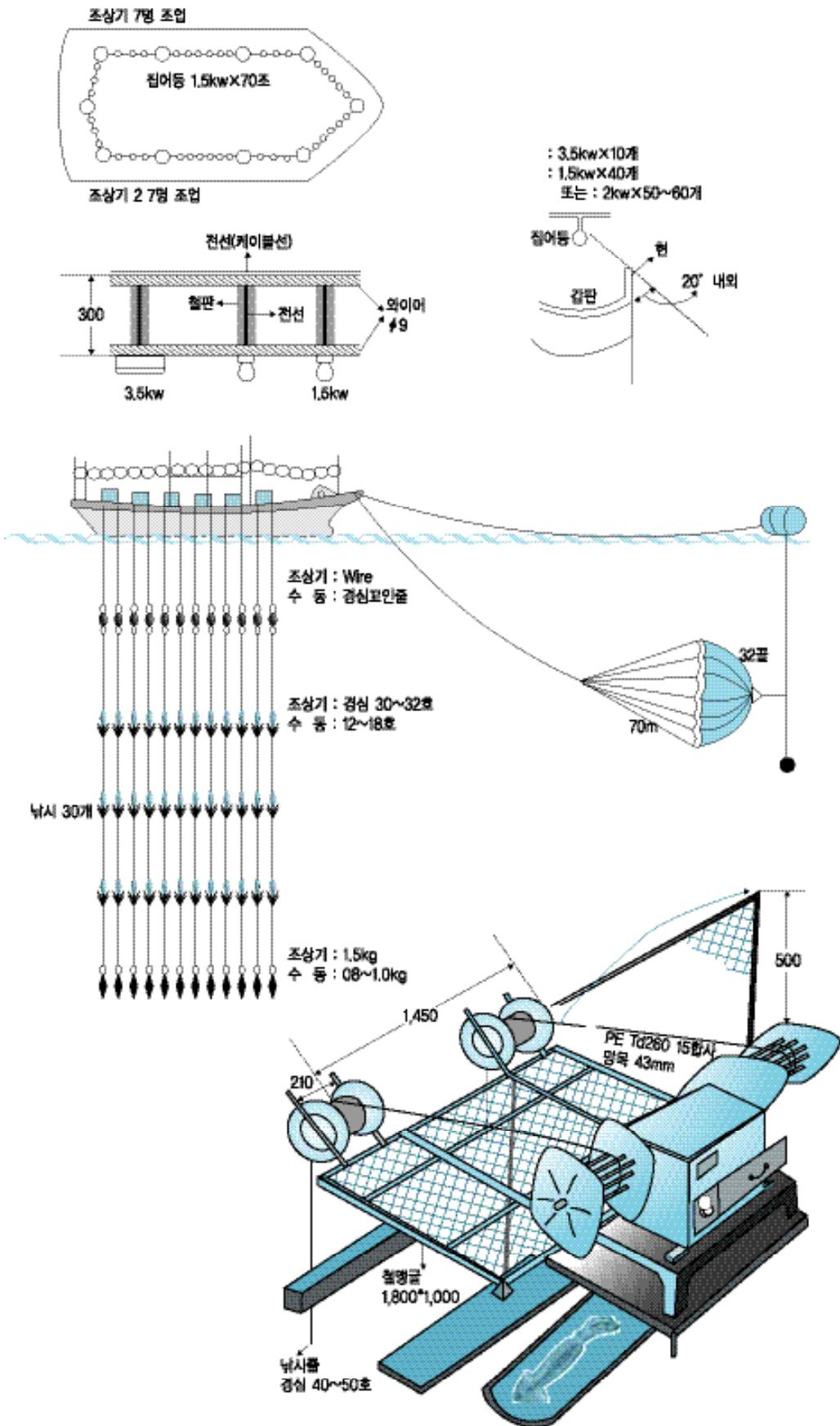
4 3 ,

1 4

5 ,

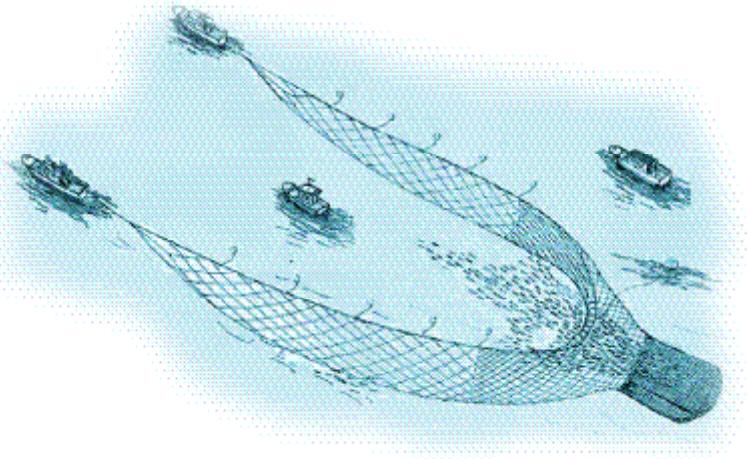
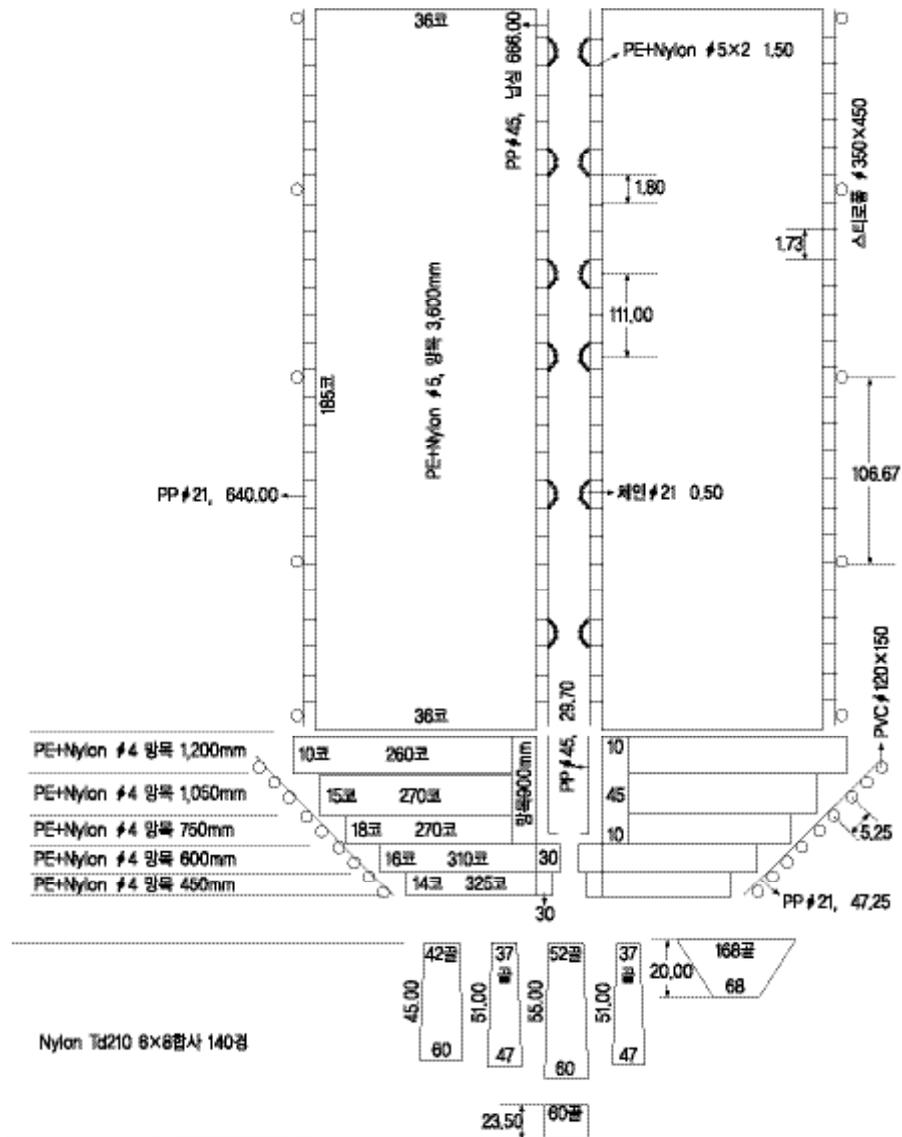
2 .

)



: 8~12
 : 100~300m,
 :
 :
 :
 가 30 1
 ,
 40 50 , 12 14 , 1m50cm .
 . 1 2kw
 , 20 30 1 2
 25 30kw , 20 가 가
 .
 가 ,
 . , , 1m70cm
 1 .
 가 가 가 .
 가 가 ,
 가 가 가
 , 가 1 2
 가 가 가 가
 22 가

)



: 7~1 , 8 11

: 50~100m,

:

:

:

800 2 , 10 15 , 15 25 , 250 300 50 70 500
 ,가 60 100 350 500 1 14 16 , 1 2 3
 200 350 1 2 3 , 30 50
 17 . 가

, ,

가

가 가

.

,

가

.

가

가

.

2

가

가

.

1가

500

700m

2

30 40

.

가

.

가

1

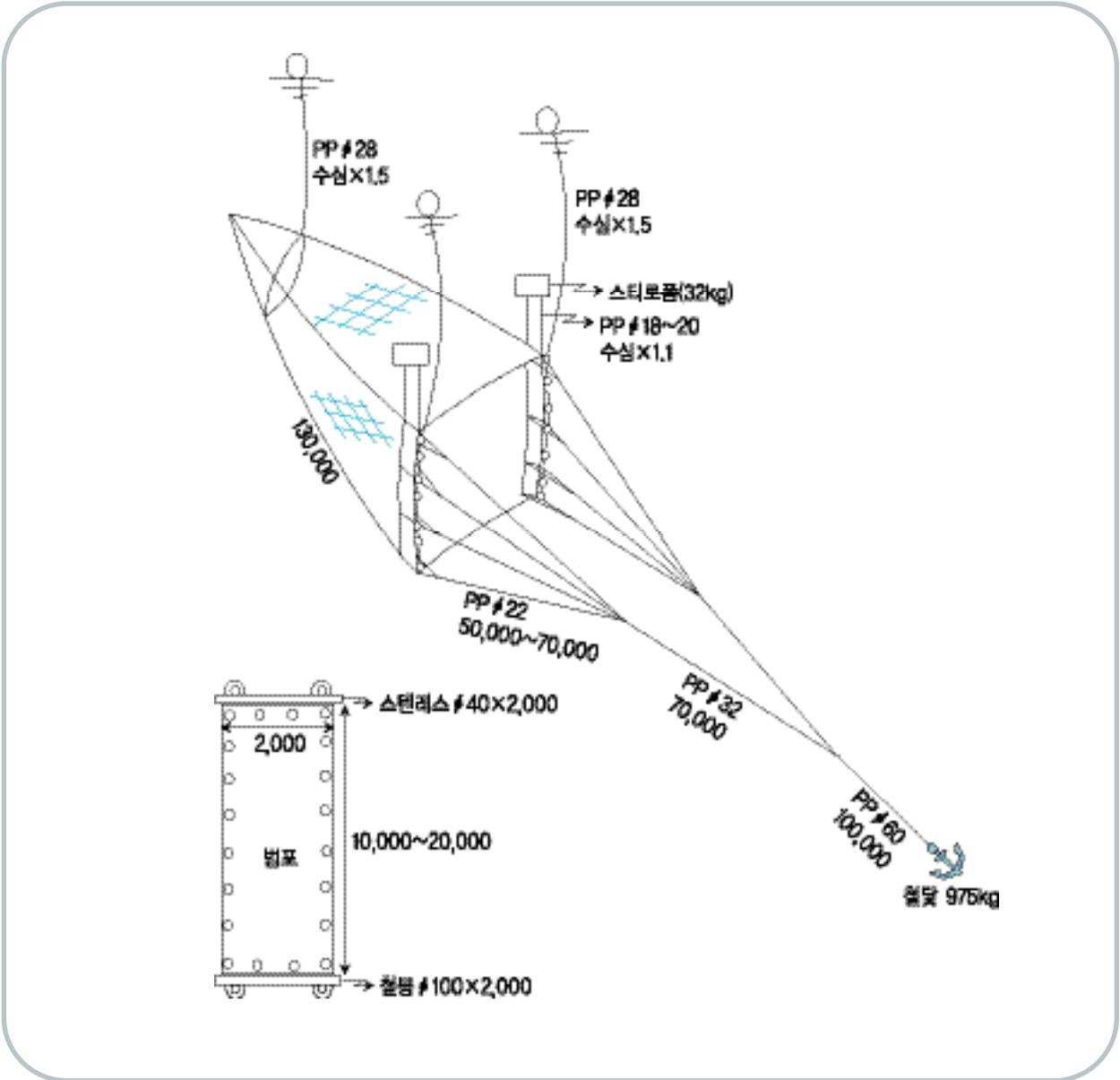
.

, 1

5 6

.

)



: 3~6 , 8~12

: 50m,

: 1~4 - ,

4~6 - , , ,

7~12 -

:

가 1.5~2m,

10~20m

가 30~40m

130m .

975kg ,

PP 60mm 100m,

() PP 32mm 70m, (

) PP 22mm 50~70m .

가 30m,

30~40m .

2 3

,

3가

4가

.

가

(30m)

.

180°

,

가

1 10 .

1 1

,가

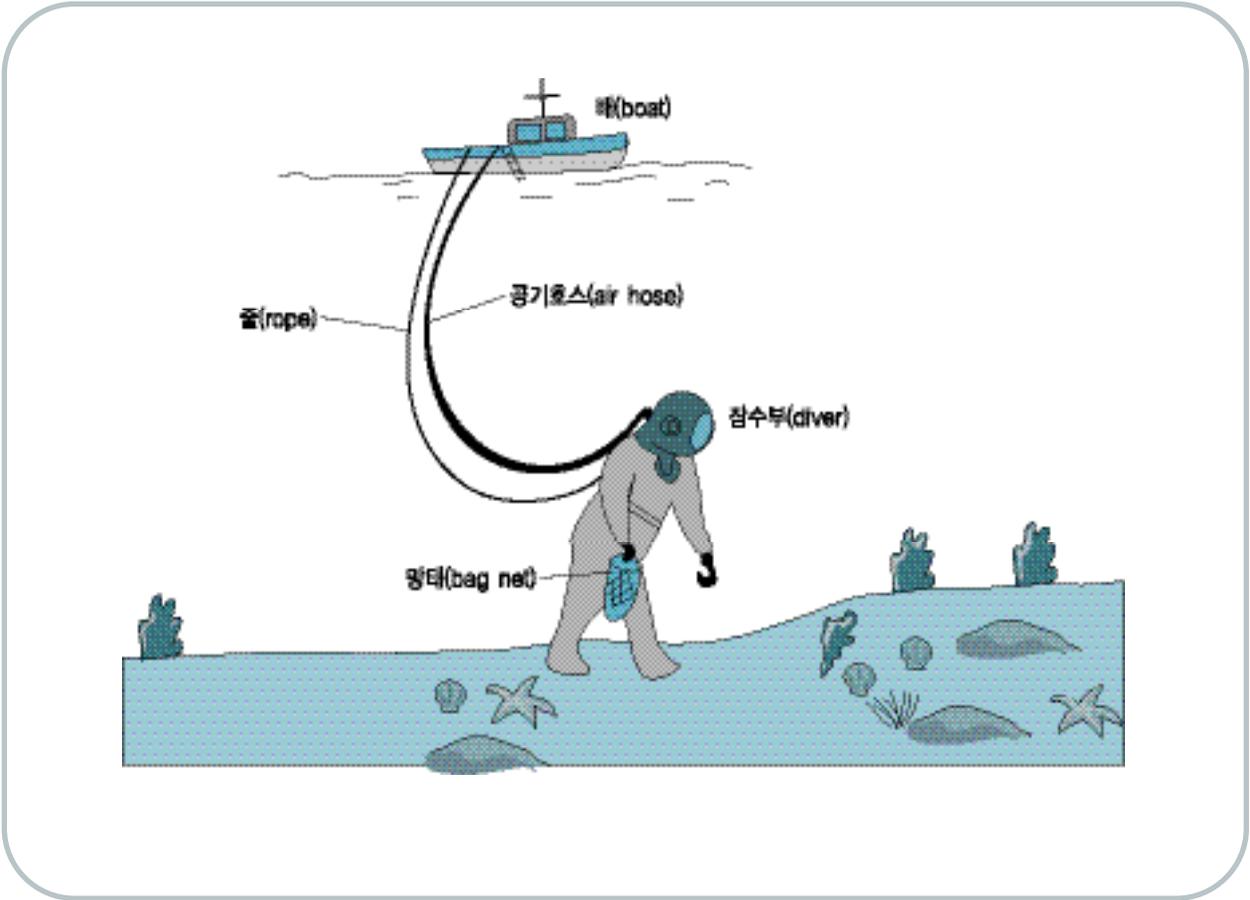
1 8 (1 1) ,

1 30 ,

1 1 .

가

)



: 3~6, 9~11

: 35~50m,

:

:

FRP 5 8 150 250 1 2 ,
1 , 2 3 .

가 , (weight), ,

, ,

가 .

10~15HP , 150m .

PP 10mm .

. 가

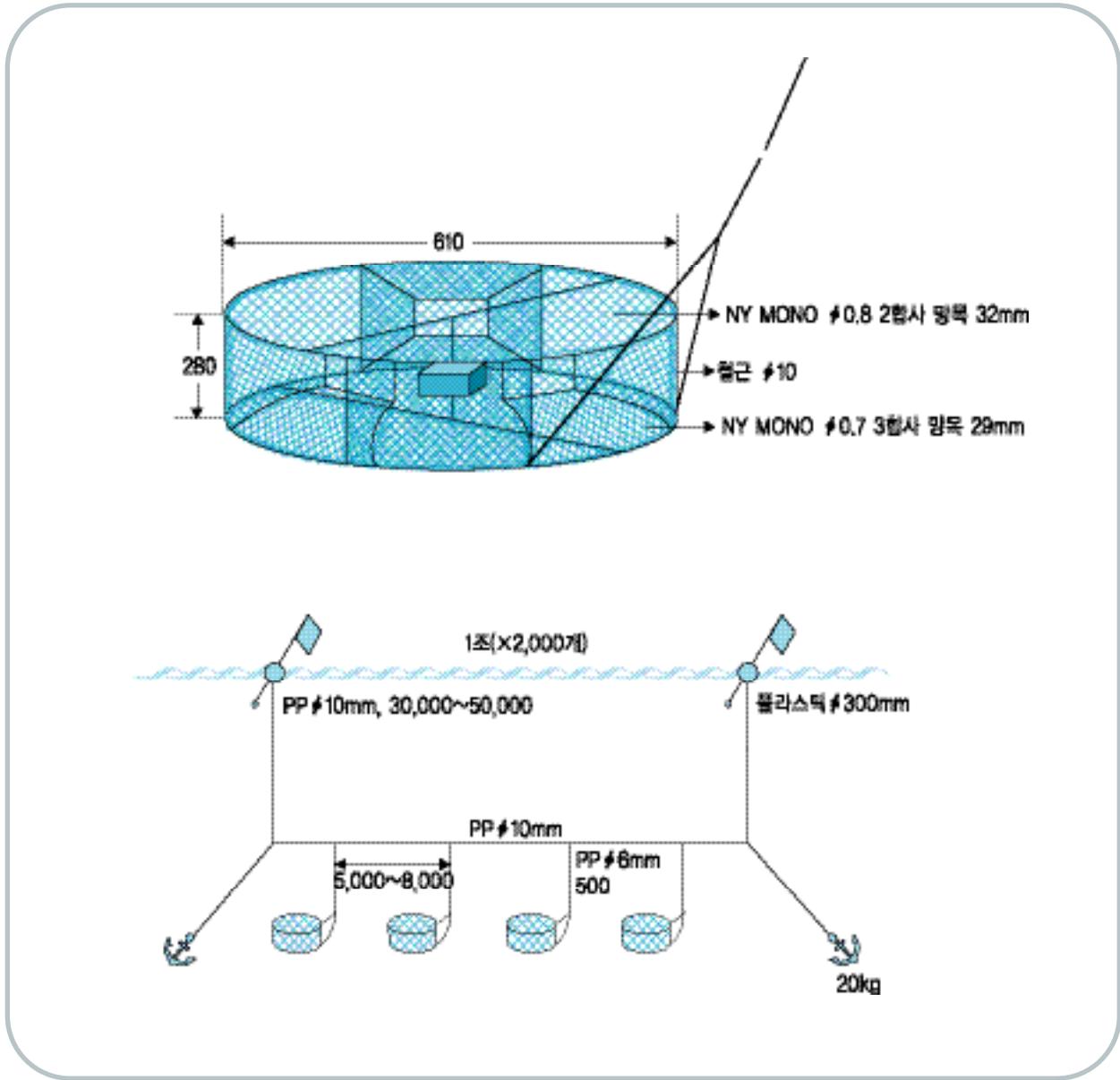
. 가

30 , 50m 20~30 , 1 5~6 30m 1 ~1 .

, 50m

30m 1 , 10m 20~30 .

)
(1)



: , 1~3 : , 9~12 : ()

: 30~50m,

: (90%), , ,

: , ,

:

10mm

NY mono 0.8mm 2

32mm

, NY mono 0.7mm 3 29mm

3

5 8m,

5m ,

2,000

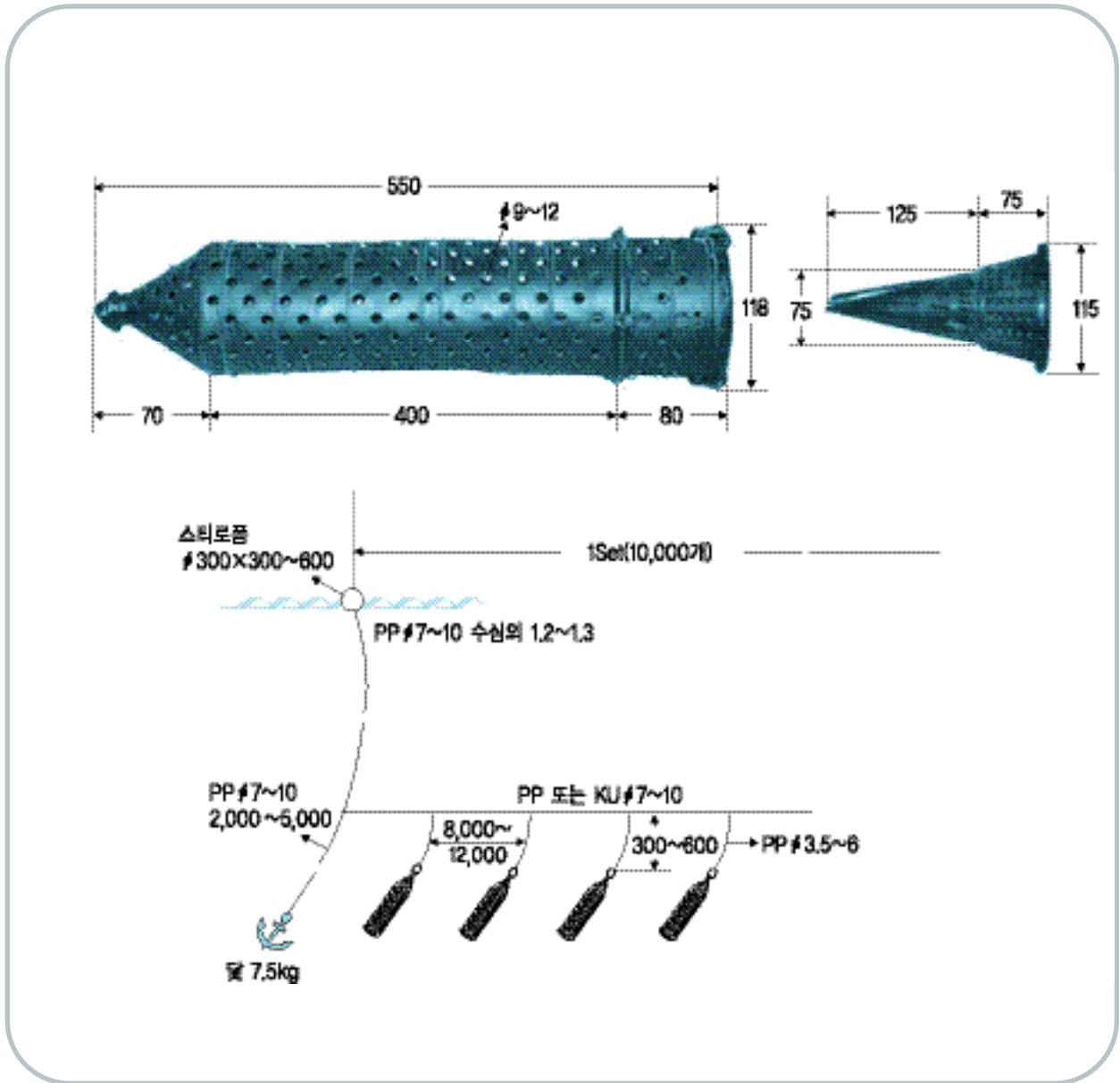
1

2

가

10~15

(2)



:

: 30~120m,

:

95%,

5%

:

,

60~70

7~10

12,000~15,000

8~12m

100 ~1000

가

10,000

6~7

가

(5,000~6,000)

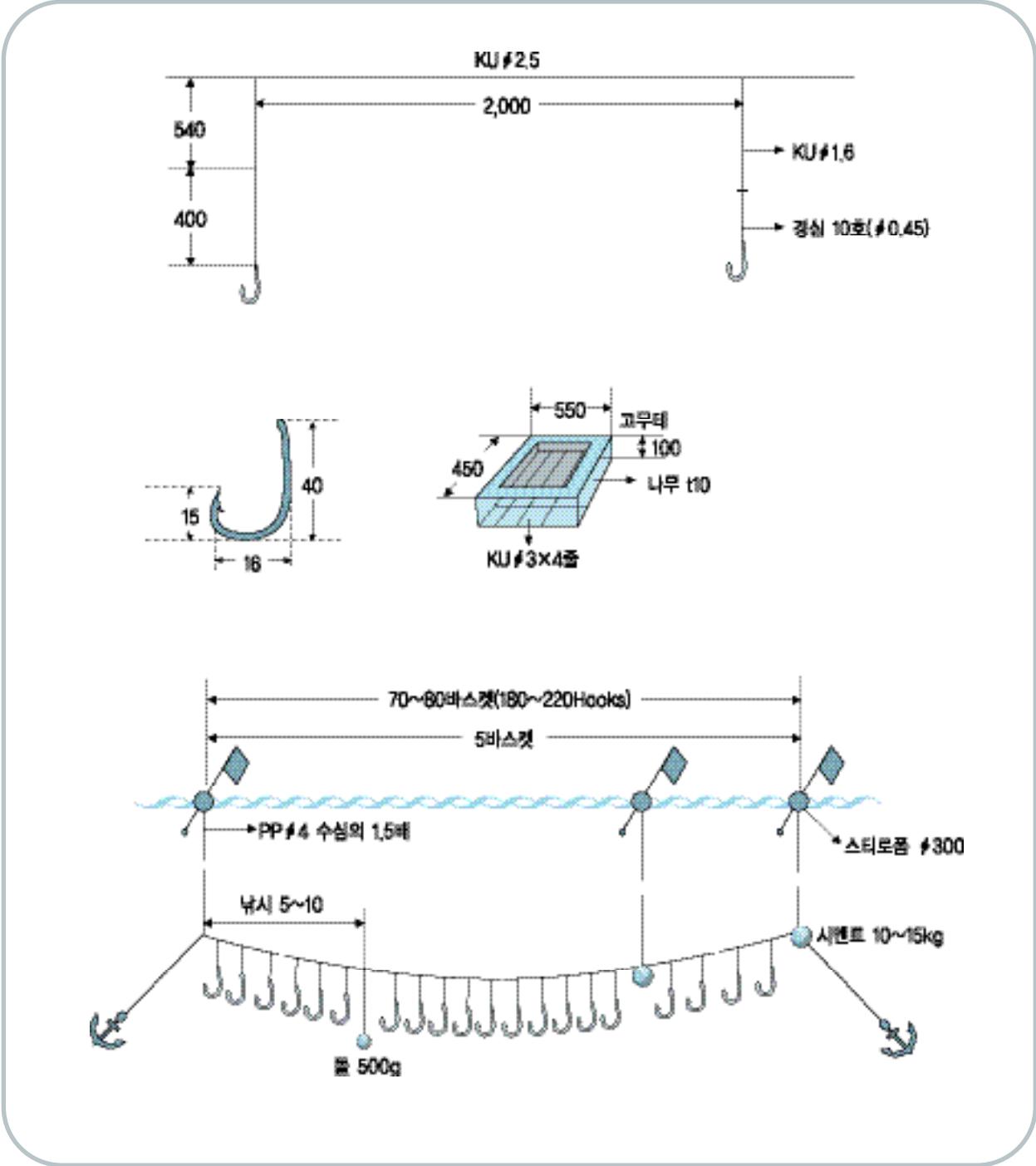
6~8

가 1 1

.1

15 가

)



: ,
 : 80~150m, ,
 : , ,가 ,
 : , , , ,
 :
 2m KU 2.5mm , KU 1.6mm 10
 , 1 200 .
 50~100mm PVC 500g
 .5 1 , 10~15kg
 .
 가 30 , ,
 . 1 300 500 1 70 80
 . 30 1 가
 , , .
 가 , 1 4 5 , 2 3 .
 1 2 1 1 30 , 4 5 .

[4.

]

가.

1)

가)

4-1 , 4-1 ,

46.53 .

가 (139.00)

(134.67) , (90.20) , (82.35) ,

(81.20) , (79.33) , 가가

(4.21) . 가 139.00 , 가

3.22 . 가

가 (36.86) , 가가 (00.00)

11.22 ,

(36.75) (36.33) , (30.67) ,

(18.50) , (17.17) , 가

(5.33) . 가가

(1.79) , 가가 (10.79) .

가 45.00 , 가

1.00 .

3.49 5.50 . 가

12.00 , 가 0.62 . 가

10.00 , 가 1.00 .

4-1.

(: ,)

		()	()						()
	139.00	135.00	99.65	129.00	139.00	79.68	78.17	39.00	
	2.97	134.00	62.00	56.00	139.00	47.24	57.00	39.00	
	46.53	134.67	82.35	90.20	139.00	64.57	63.97	39.00	
	34.03	0.58	11.69	36.86	0.00	12.71	8.75	0.00	
	46.00	27.00	41.00	25.00	10.00	43.00	46.00		
	0.70	9.00	26.00	13.00	5.00	23.00	27.00		
	11.22	17.17	36.75	18.50	7.80	30.67	36.33		
	8.95	7.76	7.18	3.87	1.79	10.79	9.50		

)

()

4 - 2

136,652.44

(1,332,191.31) ,

(2,610.86) .

(2,052,345.16) , 가

가

가가

(2,956.76) .

681,406.55 .

(3,660,094.15) ,

(1,435,007.33)

(1,385,490.86) ,

가

(6,066.67) .

가가

(2,834,579.84) ,

가가

(611.01) .

87% .

21,900.00 62,662.15

가

200,000.00 .

70,370.00

79,604.23 ,

가

240,000.00 .

4-2.

(:)

		7,594,000.00	0.96	7,706,496.00	1.00
		0.00	0.00	5,400.00	0.04
		136,652.4	0.12	681,406.55	0.87
		641,085.19	0.18	1,097,947.65	0.19
		107,353.00	0.46	780,000.00	1.00
		0.00	0.00	70,697.00	0.54
		30,567.17	0.13	242,610.83	0.87
		40,932.7	0.17	265,851.06	0.17
()		158,000.00	0.07	2,223,340.00	0.99
		22,500.00	0.01	650,000.00	0.93
		72,583.33	0.05	1,435,007.33	0.95
		48,779.52	0.02	803,710.00	0.02
()		23,500.00	0.24	244,500.00	1.00
		200.00	0.00	37,000.00	0.76
		12,210.00	0.15	101,950.00	0.85
		6,785.4	0.08	83,959.80	0.08
		7,594,000.00	0.50	7,706,496.00	0.89
		160,696.00	0.11	325,319.00	0.50
		1,332,191.31	0.24	3,660,094.15	0.76
		2,052,345.16	0.12	2,834,579.48	0.12
		150,000.00	0.17	2,939,500.00	1.00
		1,500.00	0.00	35,000.00	0.83
		39,014.29	0.07	1,385,490.86	0.93
		55,352.82	0.06	1,281,761.82	0.06
		105,000.00	0.15	686,700.00	0.97
		800.00	0.03	30,000.00	0.85
		31,980.00	0.07	350,640.00	0.93
		43,244.56	0.05	307,196.52	0.05
		315,000.00	0.71	1,039,700.00	1.00
		0.00	0.00	25,000.00	0.29
		86,450.00	0.25	368,150.00	0.75
		117,570.04	0.33	492,438.30	0.33
()		0.00	0.00	6,600.00	1.00
		0.00	0.00	5,400.00	1.00
		0.00	0.00	6,066.67	1.00
		0.00	0.00	611.01	0.00

(:)

()		10,000.00	0.17	55,000.00	0.86
		8,000.00	0.14	40,000.00	0.83
		8,666.67	0.15	48,333.33	0.85
		1,154.70	0.01	7,637.63	0.01
		85,360.00	0.50	85,360.00	0.90
		8,460.00	0.10	45,210.00	0.50
		39,197.20	0.34	65,800.00	0.66
		32,163.26	0.22	17,871.39	0.22
		80,000.00	0.17	400,000.00	1.00
		0.00	0.00	12,000.00	0.83
		20,000.00	0.05	125,642.86	0.95
		34,641.02	0.08	158,798.28	0.08
		40,000.00	0.75	59,000.00	1.00
		0.00	0.00	9,620.00	0.25
		5,741.25	0.15	23,007.50	0.85
		13,907.47	0.26	17,314.24	0.26
		6,500.00	0.48	71,080.00	1.00
		0.00	0.00	6,000.00	0.52
		3,508.33	0.11	37,888.33	0.89
		2,956.76	0.18	34,679.73	0.18
		10,127.00	0.12	74,983.00	1.00
		0.00	0.00	6,000.00	0.88
		2,610.86	0.03	53,089.71	0.97
		3,839.88	0.05	23,357.82	0.05
		600,000.00	0.49	630,000.00	1.00
		0.00	0.00	23,746.00	0.51
		71,358.90	0.10	267,210.30	0.90
		186,183.13	0.15	249,866.72	0.15
		200,000.00	0.45	240,000.00	1.00
		0.00	0.00	18,000.00	0.55
		21,900.00	0.09	70,370.00	0.91
		62,662.15	0.14	79,604.23	0.14

4-3

176,959.60
 (1,711,474.00),
 (294,666.67) ,
 (2,285,604.16) , 가 가 (4,468.74)
 114,437.22 ,
 가 (377,920.92),
 (150,000.00) , 가 가 (393,867.35) , 가 (2,934.49)
 7,000.00 10,593.50
 가 가 30,000.00
 42,900.00 68,212.82 ,
 가 200,000.00

4-3.

(:)

		7,344,720.00	1.00	1,146,540.00	1.00
		0.00	0.00	0.00	0.00
		176,959.60	0.52	114,437.22	0.47
		611,998.40	0.43	190,347.31	0.43
		135,000.00	1.00	854,000.00	0.86
		0.00	0.14	0.00	0.00
		28,366.67	0.46	149,450.00	0.54
		53,009.68	0.47	345,579.94	0.47
		678,000.00	1.00	159,000.00	0.19
()		170,000.00	0.81	0.00	0.00
		294,666.67	0.97	26,500.00	0.03
		193,785.10	0.08	64,911.8	0.08
		87,000.00	1.00	107,000.00	1.00
		0.00	0.00	0.00	0.00
()		19,200.00	0.78	20,800.00	0.22
		31,008.24	0.41	39,083.39	0.41
		7,344,720.00	1.00	1,146,540.00	1.00
		0.00	0.00	0.00	0.00
		1,711,474.00	0.67	377,920.92	0.33
		2,285,604.16	0.40	393,867.35	0.40

		240,000.00	1.00	580,000.00	0.71
		2,000.00	0.29	0.00	0.00
		103,285.71	0.80	150,000.00	0.20
		101,233.58	0.34	258,134.33	0.34
		674,000.00	1.00	182,000.00	0.82
		0.00	0.18	0.00	0.00
		152,980.00	0.64	53,340.00	0.36
		292,119.70	0.43	80,734.61	0.43
		102,100.00	0.32	214,600.00	0.91
		0.00	0.09	0.00	0.68
		19,033.33	0.21	55,266.67	0.79
		40,981.00	0.16	91,011.79	0.16
()		50,000.00	1.00	0.00	0.00
		20,000.00	1.00	0.00	0.00
		30,000.00	1.00	0.00	0.00
		17,320.51	0.00	0.00	0.00
		11,400.00	1.00	11,950.00	0.91
		853.00	0.09	0.00	0.00
		8,562.80	0.70	4,169.80	0.30
		4,468.74	0.43	5,810.73	0.43
		26,500.00	1.00	105,000.00	1.00
		0.00	0.00	0.00	0.00
		8,357.14	0.36	26,428.57	0.64
		11,010.28	0.44	41,620.74	0.44
		35,000.00	1.00	8,300.00	0.58
		0.00	0.42	0.00	0.00
		6,606.25	0.88	1,037.50	0.12
		11,791.54	0.26	2,934.49	0.26
		15,000.00	1.00	23,000.00	0.70
		2,000.00	0.30	0.00	0.00
		8,000.00	0.68	4,833.33	0.32
		5,329.17	0.35	9,020.35	0.35
		18,878.00	1.00	39,744.00	0.97
		0.00	0.03	0.00	0.00
		7,155.86	0.75	7,106.29	0.25
		6,196.85	0.41	14,866.58	0.41
		240,000.00	1.00	150,000.00	1.00
		0.00	0.00	0.00	0.00
		35,680.00	0.53	34,760.00	0.47
		72,818.20	0.41	50,546.77	0.41
		30,000.00	1.00	200,000.00	1.00
		0.00	0.00	0.00	0.00
		7,000.00	0.26	42,900.00	0.74
		10,593.50	0.37	68,212.82	0.37

)

4-4 ,

940,348.22 ,

(4,518,283.61), (2,928,087.46)

(1,504,893.00) , 가 (19,147.17) .

가가 (3,226,251.92) , 가

(1,852.03) .

898,770.37 ,

(4,877,681.58),

(2,131,920.75) (1,208,479.67) .

가가 (1,208,479.67) , 가

(1,333.00) .

41,577.84 ,

(796,166.71), (296,413.33

), (76,991.17) , (-

359,397.97), (-8,619.13), (-7,374.49),

(-6,429.58), (-5,537.67) (-

2,149.30) . 가가

(1,347,836.02) , 가가

(3,260.67) .

91,152.70 126,397.56

가 400,990.00 .

36,007.82 67,321.91 , 가

235,355.00 .

38,571.66 65,190.37 , 가

165,635.00 .

4-4.

(:)

		9,879,188.97	9,732,985.47	3,149,800.00
		11,235.00	9,690.00	(3,984,570.60)
		940,348.22	898,70.37	41,577.84
		1,899,736.02	1,919,866.62	595,400.19
		1,000,000.00	668,000.00	332,000.00
		128,962.00	138,570.00	(19,195.00)
		336,523.50	259,532.33	76,991.17
		330,851.52	202,709.32	135,265.73
		5,090,080.00	2,704,550.00	3,149,800.00
()		2,058,264.47	1,313,80.00	(88,155.00)
		2,928,087.64	2,131,920.75	796,166.71
		1,107,933.20	525,104.06	1,256,073.14
		453,217.40	662,093.22	332,979.00
()		37,205.00	25,146.00	(253,307.94)
		250,251.70	256,681.28	(6,429.58)
		184,382.31	247,47.14	137,292.64
		9,879,188.97	9,732,985.47	841,533.67
		795,812.15	729,922.95	(3,984,570.60)
		4,518,283.61	4,877,681.58	(359,397.97)
		3,226,251.92	3,123,799.78	1,347,836.02
		2,406,67.10	2,137,414.71	1,062,07.11
		372,538.00	43,399.00	(114,587.05)
		1,504,893.00	1,208,479.67	296,413.33
		930,805.73	997,528.31	360,81.39
		331,257.27	317,242.43	21,201.8
		14,860.00	15,242.00	(10,608.11)
		179,512.27	174,300.03	5,212.24
		150,47.71	144,34.76	12,511.25
		433,075.62	411,411.54	21,664.09
		39,000.00	21,190.00	5,147.32
		194,239.53	180,085.78	14,153.76
		176,67.69	176,583.60	6,959.81
		54,316.00	21,493.00	32,823.00
()		43,987.00	19,116.00	22,637.00
		47,903.33	20,653.00	27,250.33
		5,598.73	1,333.00	5,160.32
		31,700.00	38,020.00	(1,957.00)
()		28,000.00	31,957.00	(8,336.00)
		29,900.00	35,437.67	(5,537.67)
		1,852.03	3,129.7	3,260.67

(:)

		57,831.00	47,623.00	10,208.00
		15,086.00	18,498.50	(12,459.00)
		31,223.60	33,372.90	(2,149.30)
		20,767.79	12,892.38	9,455.4
		891,418.20	289,786.00	601,632.20
		20,000.00	11,071.00	(7,484.00)
		237,113.60	86,861.14	150,252.4
		340,501.63	103,529.70	238,500.01
		50,000.00	58,712.00	7,133.00
		13,000.00	14,842.00	(43,712.00)
		23,627.75	32,246.88	(8,619.13)
		12,580.51	18,405.30	17,784.57
		22,000.00	22,176.00	10,310.00
		16,000.00	9,690.00	(4,665.00)
		19,147.17	14,892.92	4,254.25
		2,134.36	4,506.69	6,009.17
		98,051.00	100,531.15	13,072.00
		30,700.00	26,928.00	(22,268.00)
		58,791.86	66,166.34	(7,374.49)
		24,997.86	23,652.71	12,025.19
		544,877.03	496,750.00	293,055.03
		11,235.00	35,666.00	(75,855.00)
		218,361.12	176,213.64	42,147.49
		213,614.68	165,147.85	106,631.73
		400,990.00	235,355.00	165,635.00
		5,798.00	181.00	(7,551.50)
		91,152.70	36,007.82	38,571.66
		126,397.56	67,321.91	65,190.37

4-5	,	,	,
가	,	,	.
433,266.07	,		
(2,229,707.88)	,	(1,301,898.80)	
(553,804.38)	.	가가	
(1,516,320.81)	,	가가	(980.73) .
		243,898.01	,
		(1,357,778.70)	,
)	(325,657.59)	.	(421,106.14
	(982,134.32)	,	가가
(0.00)	.		
	,		69,370.23
, 8,487.36	33,973.20	.	
	가	31,577.91	,
	(142,175.40)	,	가
)	(54,936.72)	.	가가
(147,138.66)	,	가	가가
			(30.55) .
		10,773.67	12,715.34
,		42,640.00	1,878.00
	28,213.89	57,619.02	,
900.00	.	가	180,915.00
3,955.91	,	12,000.00	545.00
			3,112.50

4-5.

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												가	
		4,347,990.00	0.82	3,021,150.00	0.70	1,094,500.00	0.38	131,081.41	0.06	368,313.23	0.09	385,324.80	0.50
		1,361.00	0.06	590.00	0.03	0.00	0.00	0.00	0.00	60.00	0.00	130.00	0.00
		433,266.07	0.44	243,898.01	0.34	69,370.23	0.07	8,487.36	0.01	33,973.20	0.04	31,577.91	0.07
		913,913.51	0.15	549,286.28	0.14	170,433.65	0.07	20,552.4	0.01	78,972.43	0.02	70,056.53	0.08
		431,000.00	0.65	94,955.00	0.53	46,000.00	0.10	30,000.00	0.06	28,000.00	0.04	39,000.00	0.15
		47,300.00	0.30	72,000.00	0.14	4,870.00	0.04	800.00	0.01	3,200.00	0.02	980.00	0.01
		123,938.83	0.40	83,653.17	0.41	15,645.50	0.06	9,883.33	0.03	8,100.00	0.03	16,772.50	0.06
		150,716.31	0.13	11,123.61	0.14	15,399.4	0.02	11,178.63	0.02	9,768.93	0.01	15,951.06	0.05
	()	1,951,700.00	0.72	586,860.00	0.25	203,600.00	0.11	59,000.00	0.02	118,000.00	0.06	110,155.00	0.05
		727,000.00	0.54	296,680.00	0.14	82,330.59	0.04	10,000.00	0.01	12,500.00	0.00	32,500.00	0.01
		1,301,898.80	0.60	421,106.14	0.20	127,888.43	0.06	27,352.81	0.01	78,632.40	0.04	60,823.23	0.03
		411,168.13	0.07	110,953.23	0.04	41,117.35	0.02	19,164.97	0.01	39,940.12	0.02	36,021.89	0.01
	()	475,688.93	0.72	145,868.00	0.49	21,719.94	0.38	12,500.00	0.03	38,124.29	0.07	10,360.00	0.08
		9,150.00	0.24	10,478.00	0.21	1,488.00	0.01	180.00	0.00	1,800.00	0.03	1,850.00	0.00
		144,495.8	0.44	73,306.98	0.36	9,413.52	0.07	2,267.26	0.01	12,028.63	0.05	4,817.80	0.04
		162,466.21	0.15	63,650.26	0.10	7,461.73	0.10	3,980.23	0.01	12,223.20	0.01	3,715.01	0.03
		4,347,990.00	0.59	3,021,150.00	0.41	1,094,500.00	0.29	131,081.41	0.02	368,313.23	0.07	385,324.80	0.05
		377,005.00	0.30	182,676.00	0.08	60,373.00	0.02	180.00	0.00	18,419.00	0.01	2,500.00	0.00
		2,229,707.88	0.45	1,357,778.70	0.27	391,660.34	0.10	42,465.00	0.01	195,867.54	0.04	142,175.40	0.03
		1,516,320.81	0.09	982,134.32	0.10	313,049.84	0.09	40,697.90	0.01	135,376.06	0.02	147,138.66	0.02
		1,241,478.99	0.58	623,100.00	0.46	386,500.00	0.38	24,300.00	0.01	63,355.40	0.04	110,208.00	0.06
		12,700.00	0.28	12,209.00	0.22	14,900.00	0.05	0.00	0.00	1,600.00	0.02	1,750.00	0.02
		553,804.38	0.39	325,657.59	0.28	142,354.47	0.21	8,663.47	0.01	33,652.40	0.03	54,936.72	0.05
		517,585.01	0.12	270,162.80	0.08	145,934.89	0.13	10,124.53	0.00	29,347.14	0.01	52,155.45	0.01
		136,257.29	0.52	86,536.76	0.51	13,250.29	0.04	3,560.00	0.01	11,376.00	0.07	34,335.00	0.12
		7,300.00	0.32	3,824.00	0.25	595.00	0.04	208.00	0.01	1,000.00	0.03	1,500.00	0.07
		75,387.39	0.43	49,163.92	0.32	7,180.61	0.04	1,812.06	0.01	6,711.44	0.05	17,532.00	0.09
		62,719.31	0.07	39,359.06	0.11	6,018.82	0.00	1,520.86	0.00	5,266.8	0.01	15,359.83	0.02
		162,994.26	0.47	136,236.25	0.53	17,323.02	0.08	3,541.00	0.01	13,264.34	0.05	51,985.00	0.15
		5,860.00	0.28	11,300.00	0.27	1,560.00	0.04	50.00	0.00	910.00	0.03	1,250.00	0.03
		75,120.95	0.38	56,340.88	0.40	7,769.58	0.05	1,630.33	0.01	6,598.20	0.04	18,407.50	0.07
		74,100.06	0.07	51,724.8	0.12	7,067.13	0.02	1,653.36	0.00	6,204.90	0.01	24,621.91	0.05
	()	16,180.00	0.76	590.00	0.03	2,173.00	0.10	1,000.00	0.05	1,500.00	0.07	330.00	0.02
		13,800.00	0.72	590.00	0.03	1,760.00	0.08	900.00	0.05	1,200.00	0.06	270.00	0.01
		15,160.00	0.73	590.00	0.03	1,916.33	0.09	966.67	0.05	1,300.00	0.06	303.33	0.01
		1,225.89	0.02	0.00	0.00	224.04	0.01	57.7	0.00	173.21	0.01	30.55	0.00

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												가	
()		15,680.00	0.43	18,730.00	0.49	1,268.00	0.04	47.00	0.00	1,000.00	0.03	2,750.00	0.08
		13,540.00	0.39	13,730.00	0.42	1,120.00	0.03	36.00	0.00	95.00	0.00	2,000.00	0.06
		14,720.00	0.42	15,936.67	0.45	1,196.00	0.03	43.33	0.00	698.33	0.02	2,416.67	0.07
		1,086.83	0.02	2,551.10	0.04	74.08	0.00	6.35	0.00	522.50	0.02	381.88	0.01
		17,663.00	0.37	17,160.00	0.43	3,104.00	0.07	0.00	0.00	2,299.00	0.09	14,800.00	0.50
		3,958.00	0.13	7,950.00	0.27	696.00	0.03	0.00	0.00	1,245.00	0.04	2,421.50	0.13
		9,440.60	0.26	11,158.60	0.34	1,447.60	0.04	0.00	0.00	1,666.20	0.05	9,090.30	0.28
		6,557.16	0.10	4,401.63	0.06	1,031.20	0.02	0.00	0.00	401.90	0.02	4,778.26	0.15
		100,318.00	0.53	150,750.00	0.56	12,248.00	0.16	2,158.00	0.01	1,412.00	0.03	22,000.00	0.18
		4,941.00	0.33	3,600.00	0.26	200.00	0.00	50.00	0.00	270.00	0.00	600.00	0.03
		34,047.57	0.43	40,872.29	0.41	3,385.71	0.06	531.86	0.01	876.43	0.02	6,931.00	0.08
		35,782.05	0.08	54,946.85	0.11	4,461.04	0.06	769.20	0.00	407.7	0.01	8,020.24	0.05
		45,300.00	0.77	18,000.00	0.55	2,720.00	0.06	600.00	0.02	1,400.00	0.03	9,567.00	0.22
		4,529.00	0.25	7,200.00	0.15	520.00	0.01	0.00	0.00	60.00	0.00	481.00	0.03
		15,920.25	0.43	10,968.75	0.40	1,085.00	0.04	180.00	0.01	610.00	0.02	3,289.13	0.10
		15,139.36	0.17	4,020.40	0.13	727.29	0.02	206.95	0.01	473.29	0.01	3,111.35	0.07
		3,790.00	0.25	11,550.00	0.70	980.00	0.09	340.00	0.02	1,480.00	0.09	10,655.00	0.48
		1,361.00	0.06	6,000.00	0.35	650.00	0.04	30.00	0.00	130.00	0.01	130.00	0.01
		2,202.83	0.16	8,244.17	0.60	848.17	0.06	205.00	0.01	721.17	0.05	2,671.58	0.14
		982.73	0.08	1,995.30	0.13	115.98	0.02	123.73	0.01	612.23	0.04	4,109.96	0.18
		61,658.00	0.76	26,892.00	0.40	2,534.00	0.04	800.00	0.01	4,000.00	0.06	5,300.00	0.10
		16,160.00	0.49	6,790.00	0.12	70.00	0.00	12.00	0.00	700.00	0.02	667.00	0.01
		42,080.86	0.63	17,095.71	0.26	1,487.43	0.02	235.86	0.00	2,207.14	0.03	2,719.49	0.05
		15,716.42	0.08	9,186.08	0.10	937.69	0.01	302.97	0.01	1,135.4	0.01	1,657.19	0.03
		276,000.00	0.82	163,940.00	0.46	14,000.00	0.07	2,270.00	0.01	25,000.00	0.06	30,750.00	0.28
		16,670.00	0.38	7,494.00	0.14	0.00	0.00	10.00	0.00	333.00	0.00	338.00	0.00
		91,752.45	0.52	62,77.36	0.33	6,37.36	0.04	567.55	0.00	3,303.00	0.02	12,061.40	0.07
		87,090.89	0.11	62,850.42	0.10	5,440.8	0.02	683.96	0.00	7,232.91	0.02	9,787.69	0.08
		42,640.00	0.46	180,715.00	0.77	8,200.00	0.60	0.00	0.00	0.00	0.00	12,000.00	0.18
		1,878.00	0.18	900.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	545.00	0.00
		10,773.67	0.33	28,213.89	0.45	2,172.78	0.17	0.00	0.00	0.00	0.00	3,112.50	0.08
		12,715.34	0.10	57,619.02	0.23	2,991.27	0.23	0.00	0.00	0.00	0.00	3,955.91	0.07

4-6 , .

-3% , 10%

(21%), (57%), (40%), (37%),

(20%), (20%) (12%) .

(-26%), (-54%), (-50%), (-31%),

(-19%) (-18%) .

가가 (209%) , 가

(5%) .

228% ,

(704%), (541%), (339%),

(278%) (232%) .

(1,099%) , 가

가가 (12%) .

33% ,

(150%), (51%),

(39%) (34%) .

(209%) , 가

가가

(7%) .

1.95 ,

(7.90) , (4.51

), (3.05) , (2.34) .

가가 (4.64) , 가

(0.12) .

15% 68% .

5%, 6% , 145% 321%

1.44 1.72 5.05

4-6.

				()	
		0.89	35.00	10.64	5.31
		(6.75)	0.00	0.20	0.00
		(0.03)	2.28	1.95	0.33
		0.84	4.91	2.21	0.62
		0.41	1.30	1.82	1.21
		(0.10)	0.30	0.94	0.00
		0.12	0.73	1.50	0.34
		0.21	0.52	0.34	0.51
		0.62	0.54	6.88	0.37
()		(0.04)	0.12	0.93	0.08
		0.21	0.26	3.05	0.24
		0.28	0.15	2.42	0.13
		0.89	3.00	9.30	0.64
()		(0.62)	0.27	0.93	0.08
		0.12	1.53	2.34	0.26
		0.41	1.07	2.53	0.20
		0.24	35.00	2.80	0.98
		(1.61)	0.13	0.53	0.03
		(0.31)	7.04	1.42	0.39
		0.66	10.99	0.58	0.32
		0.89	2.50	10.64	0.27
		(0.06)	0.01	0.79	0.05
		0.40	0.94	4.51	0.13
		0.43	0.92	4.64	0.10
		0.07	0.93	0.78	0.97
		(0.05)	0.16	0.39	0.00
		0.02	0.50	0.57	0.33
		0.06	0.34	0.17	0.39
		0.47	5.93	1.98	0.28
		0.01	0.85	0.34	0.00
		0.20	3.39	1.26	0.07
		0.20	3.59	0.69	0.12
		0.60	0.00	8.23	0.00
()		0.51	0.00	7.32	0.00
		0.57	0.40	7.90	0.00
		0.05	0.20	0.50	0.00

				()	
()		(0.07)	0.40	0.75	0.77
		(0.30)	0.20	0.51	0.34
		(0.19)	0.33	0.63	0.51
		0.12	0.12	0.12	0.23
		0.18	10.00	0.77	0.24
		(0.73)	1.00	0.20	0.07
		(0.26)	5.41	0.46	0.13
		0.42	3.49	0.24	0.07
		0.76	4.71	6.00	0.45
		(0.37)	0.00	0.40	0.00
		0.37	2.32	2.13	0.18
		0.45	2.35	1.83	0.18
		0.26	11.43	3.70	0.90
		(2.91)	0.00	0.25	0.00
		(0.54)	2.78	1.47	0.23
		1.07	4.91	1.09	0.33
		0.52	3.25	3.67	5.31
		(0.27)	0.00	0.25	0.07
		0.20	1.01	1.69	1.50
		0.30	1.24	1.59	2.09
		0.33	3.66	6.67	0.52
		(0.73)	0.00	0.65	0.00
		(0.18)	0.76	1.81	0.21
		0.34	1.44	2.16	0.17
		0.55	2.50	1.85	1.15
		(6.75)	0.13	0.44	0.00
		(0.50)	1.03	1.07	0.29
		2.09	1.06	0.48	0.33
		0.93	0.10	5.05	10.50
		(1.21)	0.00	0.00	0.00
		0.15	0.05	1.44	1.45
		0.68	0.06	1.72	3.21

2)

가)

4-7

3.46

(6.91)

(3.8)

(1.54)

가

9.77

0.86

(2.70)

(0.54)

8.95

(9.71)

(7.47)

(2.00)

24

가

가

(4.58)

가

(0.71)

4-7. (: ,)

	9.77	1.92	9.77	5.00	7.93	7.93	
	0.86	1.16	0.86	1.07	5.88	1.41	
	3.46	1.54	3.80	2.76	6.91	3.54	
	2.33	0.54	2.70	1.36	1.45	2.44	
	24.00	3.00	15.00	24.00	4.00	17.00	
	1.00	1.00	3.00	1.00	3.00	1.00	
	8.95	2.00	9.47	9.47	3.50	9.71	
	5.00	1.41	3.93	6.31	0.71	4.58	

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4 - 8

10,154.78

(13,819.5), (12,431.43)

가가

(85,095.00) 34,165.78

(38,192.79) , 가 (72,315.00),

) (25,746.53

4-8.

(:)

		85,095.00	1.00	182,300.00	1.00
		0.00	0.00	1,500.00	0.00
		10,154.78	0.26	34,165.78	0.7
		17,179.97	0.29	32,231.57	0.29
		5,000.00	0.12	47,250.00	0.90
		3,000.00	0.10	21,690.00	0.88
		4,000.00	0.11	34,470.00	0.89
		1,414.21	0.02	18,073.65	0.02
		44,500.00	1.00	182,300.00	1.00
		0.00	0.00	1,500.00	0.00
		8,042.94	0.34	38,192.79	0.66
		11,446.94	0.37	47,281.31	0.37
		85,095.00	0.61	54,900.00	1.00
		0.00	0.00	3,000.00	0.39
		13,819.50	0.18	30,940.40	0.82
		26,005.26	0.21	17,190.53	0.21
		0.00	0.00	93,150.00	1.00
		0.00	0.00	51,480.00	1.00
		0.00	0.00	72,315.00	1.00
		0.00	0.00	29,465.14	0.00
		58,000.00	0.67	59,388.00	1.00
		0.00	0.00	2,600.00	0.33
		12,431.43	0.27	25,746.50	0.73
		18,053.33	0.24	17,846.68	0.24

가 (25,560.00) , (180,800.00) ,
 74% , (89%), (82%)

4-9

6,013.89
 (10,839.71)
 가 (58,125.00) , 가
 (10,000.00) 0
 21,570.22 , 가
 (36,500.00) , (24,392.14) (23,868.82
) , 가
) , 가 (25,000.00) (12,3000.00

4-9.

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		58,125.00	1.00	123,000.00	1.00
		0.00	0.00	0.00	0.00
		6,013.89	0.28	21,570.22	0.72
		13,728.98	0.40	27,528.31	0.40
		0.00	0.00	25,000.00	1.00
		0.00	0.00	0.00	1.00
		0.00	0.00	12,500.00	1.00
		0.00	1.00	17,677.67	
		58,125.00	0.00	81,600.00	1.00
		0.00	0.37	0.00	0.00
		10,839.71	0.41	23,868.82	0.63
		19,482.01		24,970.43	0.41
		23,250.00	1.00	37,800.00	1.00
		0.00	0.00	0.00	0.00
		4,355.00	0.25	12,540.00	0.75
		8,754.63	0.39	15,124.98	0.39
		10,000.00	0.42	59,000.00	1.00
		0.00	0.00	14,000.00	0.58
		5,000.00	0.21	36,500.00	0.79
		7,071.07	0.29	31,819.81	0.29
		29,400.00	1.00	123,000.00	1.00
		0.00	0.00	0.00	0.00
		2,342.86	0.23	24,392.14	0.77
		7,816.52	0.44	37,576.81	0.44

4 - 10

16,425.45 ,

가

(36,500.00) , (19,827.65) (17,003.85

) .

(83,000.00) , 가 가 (5,000.00)

5,494.22 ,

(10,000.00) ,

(8552.86) .

가 가 (100,000.00) , 가

(18,000.00) 0 .

4-10. (:)

		83,000.00	1.00	100,000.00	0.85	700.00	0.64
		0.00	0.15	0.00	0.00	0.00	0.00
		16,425.45	0.79	5,494.22	0.19	15.56	0.02
		22,089.8	0.32	16,840.33	0.31	104.35	0.11
		5,000.00	0.20	20,000.00	0.80	0.00	0.00
		0.00	0.20	0.00	0.80	0.00	0.00
		2,500.00	0.20	10,000.00	0.80	0.00	0.00
		3,535.53		14,142.14		0.00	
		81,600.00	1.00	50,000.00	0.85	0.00	0.00
		0.00	0.15	0.00	0.00	0.00	0.00
		19,827.65	0.84	4,041.18	0.16	0.00	0.00
		24,047.15	0.32	12,242.50	0.32	0.00	0.00
		36,600.00	1.00	18,000.00	0.75	0.00	0.00
		0.00	0.25	0.00	0.00	0.00	0.00
		8,660.00	0.76	3,880.00	0.24	0.00	0.00
		12,656.15	0.34	6,583.62	0.34	0.00	0.00
		59,000.00	1.00	0.00	0.00	0.00	0.00
		14,000.00	1.00	0.00	0.00	0.00	0.00
		36,500.00	1.00	0.00	0.00	0.00	0.00
		31,819.81	0.00	0.00	0.00	0.00	0.00
		83,000.00	1.00	100,000.00	0.81	700.00	0.64
		0.00	0.19	0.00	0.00	0.00	0.00
		17,003.85	0.77	8,552.86	0.17	50.00	0.06
		24,606.10	0.32	26,597.00	0.29	187.08	0.20

)

4-11 , , 38,421.51 ,
 (81,834.00) ,
 (65,720.00) (45,486.70) .
 가가 (197,651.50) , 가
 (2,550.00) 0 .

4-11. (:)

		200,651.50	127,645.60	87,052.73
		850.00	429.00	(17,213.51)
		38,421.51	24,111.14	13,526.26
		36,531.09	26,187.33	19,724.92
		66,995.00	67,152.02	2,173.63
		64,445.00	62,271.37	(157.02)
		65,720.00	64,711.70	1,008.31
		1,803.12	3,451.14	1,648.02
		200,651.50	127,645.60	73,005.90
		3,000.00	1,600.00	(17,213.51)
		45,486.70	29,546.45	15,940.25
		49,066.18	33,008.16	21,096.94
		56,192.50	31,606.20	43,728.40
		2,800.00	1,290.00	595.00
		26,215.69	14,576.05	11,639.64
		13,240.69	8,072.42	11,722.47
		81,834.00	42,685.90	39,148.10
		81,834.00	429.00	(429.00)
		81,834.00	21,557.45	19,359.55
		0.00	29,880.14	27,985.24
		112,471.18	86,800.00	87,052.73
		850.00	1,116.00	(14,800.00)
		35,047.51	21,610.94	13,436.57
		34,475.75	25,661.00	25,497.25

24,111.14 ,
 (64,711.70) (29,546.45)
 .
 가가
 (126,045.60) ,가 (4,880.65) .

13,526.26 ,
 (19,359.55) (15,940.25) .
 가가 (101,852.73) ,가
 (2,330.65) .

4-12 , , ,
 , 가 , , .

13,447.16 ,
 (15,916.52) (13,998.20) .
 가가 (50,951.60) ,가
 (11,461.35) 0 .

9,244.36 ,
 (48,990.00) , (30,300.00)
 (11,652.401) . 가가
 (75,260.00) ,가 (16,470.00)
 0 .

384.61 , 119.69
 164.64 .

가 1153.94 , 가
 (1,723.50) , (1,215.99)
 (1,179.22) . 가 가가
 (6,556.56) ,가 (348.00) .

4-12.

(:)

												가	
		51,826.60	1.00	75,260.00	0.86	4,160.92	0.11	1,392.00	0.05	2,000.00	0.06	6,556.56	1.00
		720.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		13,447.16	0.65	9,244.36	0.23	384.61	0.02	119.69	0.01	164.64	0.00	1,153.94	0.11
		12,343.38	0.27	16,320.15	0.26	896.98	0.03	271.58	0.01	453.05	0.01	1,210.00	0.16
		19,728.87	0.32	57,800.00	0.86	0.00	0.00	0.00	0.00	0.00	0.00	2,362.50	0.04
		8,267.52	0.12	40,180.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	1,084.50	0.02
		13,998.20	0.22	48,990.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	1,723.50	0.03
		8,104.40	0.14	12,459.22	0.15	0.00	0.00	0.00	0.00	0.00	0.00	903.68	0.02
		51,826.60	0.99	75,260.00	0.63	3,827.00	0.09	890.00	0.02	1,780.00	0.04	6,556.56	0.38
		875.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		15,916.52	0.62	11,652.41	0.26	387.36	0.01	103.82	0.00	160.59	0.00	1,215.99	0.10
		15,002.22	0.24	19,639.36	0.23	987.02	0.02	238.59	0.01	476.4	0.01	1,601.50	0.12
		20,650.20	1.00	16,470.00	0.57	1,000.00	0.11	558.00	0.04	232.50	0.01	3,983.19	0.25
		1,000.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		11,027.58	0.76	2,032.07	0.11	160.00	0.02	70.57	0.00	16.61	0.00	1,179.22	0.09
		6,304.73	0.24	4,458.60	0.20	317.58	0.03	154.56	0.01	62.14	0.00	1,150.63	0.08
		9,730.10	0.23	30,300.00	0.71	1,878.80	0.04	0.00	0.00	0.00	0.00	777.00	1.00
		9,730.10	0.23	30,300.00	0.71	1,878.80	0.04	0.00	0.00	0.00	0.00	429.00	0.02
		9,730.10	0.23	30,300.00	0.71	1,878.80	0.04	0.00	0.00	0.00	0.00	603.00	0.51
		0.00		0.00		0.00		0.00		0.00		246.07	0.69
		49,000.00	0.99	33,600.00	0.71	4,160.92	0.11	1,392.00	0.05	2,000.00	0.06	2,698.16	0.39
		720.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		13,055.00	0.66	6,350.68	0.20	554.09	0.02	213.73	0.01	352.86	0.01	1,050.65	0.09
		14,610.81	0.27	10,327.60	0.26	1,152.91	0.03	396.16	0.01	625.10	0.02	862.52	0.11

4-13

27%

(48%)

가가

(4%)

(300%) , 가

(42%)

(0%)

199% ,
 (182%) (144%) .
 가가 (633%) , 가 (33%)
 (0%) .

4-13.

		()			
		0.96	6.33	13.33	12.83
		(2.08)	0.00	0.00	0.00
		0.27	1.19	1.57	1.18
		0.52	1.90	2.24	2.13
		0.03	0.00	3.09	1.01
		(0.00)	0.00	1.36	0.00
		0.02		2.23	0.51
		0.03		1.22	0.72
		0.92	6.33	13.33	12.83
		(2.08)	0.00	0.26	0.23
		0.23	1.44	2.44	1.91
		0.72	2.07	3.56	3.14
		0.80	4.65	1.24	1.00
		0.03	0.00	0.51	0.00
		0.42	1.82	0.84	0.39
		0.23	2.49	0.21	0.32
		0.48	0.00	0.88	1.15
		0.48	0.00	0.00	0.26
		0.48	0.00	0.44	0.70
				0.62	0.63
		0.96	0.33	2.80	3.97
		(0.98)	0.00	0.27	0.03
		0.20	0.11	1.25	0.99
		0.49	0.19	0.84	1.14

118% ,
 (191%) .
 (1,260%) , 가 (89%) .
 가가
 1.57 ,
 (2.44) (2.23) .
 가가 (13.08) , 가
 (0.73) .

) 가 가
 4-14 가 ,
 , 가
 35,418.17 , 가 가
 (45,180.53) (35,888.60)
 . 가 가
 (115,137.38) , 가 (50,420.00)
 (0) .

4-14. 가 (:)

		50,000.00	2,500.00
		800.00	0.00
		19,785.29	182.35
		17,322.69	609.54
		40,000.00	0.00
		2,500.00	0.00
		18,500.00	0.00
		15,771.81	0.00
		50,000.00	100.00
		1,050.00	0.00
		23,435.71	14.29
		21,807.7	37.80
		35,000.00	2,500.00
		800.00	0.00
		15,960.00	600.00
		13,946.61	1,083.97

가 768.76 ,
 가 가
 (1,780.91) . 가 가
 (17,934.00) , 가 (780.00)
 (0) .

4-15 가 , 가
 , , 가
 25,465.65 , 가
 가 (36,852.20) (26,801.51
) . 가 가가
 (90,000.00) , 가 (29,986.20)
 (0) .

4-15. 가 (:)

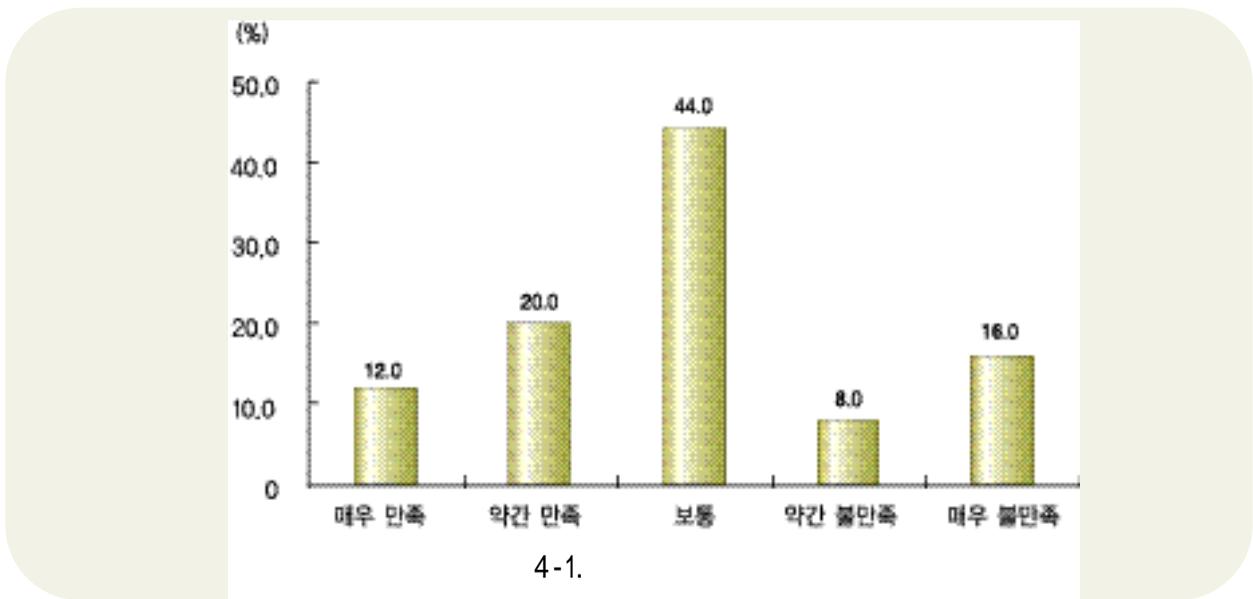
		90,000.00	700.00	42,000.00
		0.00	0.00	0.00
		25,465.65	43.57	13,373.03
		21,485.86	153.83	12,176.79
		0.00	0.00	0.00
		0.00	0.00	0.00
		0.00	0.00	0.00
		0.00	0.00	0.00
		90,000.00	546.00	36,000.00
		0.00	0.00	0.00
		36,852.20	49.64	18,469.75
		24,737.94	164.63	11,913.27
		29,986.20	366.00	32,940.00
		0.00	0.00	0.00
		15,278.63	26.14	8,835.43
		8,656.34	97.82	10,199.71
		0.00	0.00	0.00
		0.00	0.00	0.00
		0.00	0.00	0.00
		0.00	0.00	0.00
		72,000.00	700.00	42,000.00
		800.00	0.00	0.00
		26,801.51	58.33	13,947.08
		24,298.04	202.07	13,342.17

	가	43.57	,	
가		가		
(58.33)	(49.64)	.	가	
가 가		(700.00)	, 가	
(366.00)		(0)	.	
	가	13,373.03	,	가 가
가			(18,469.75)	
(13947.08)	.	가	가 가	
(42,000.00)	,	가 가	(32,940.00)	
		(0)	.	

1)

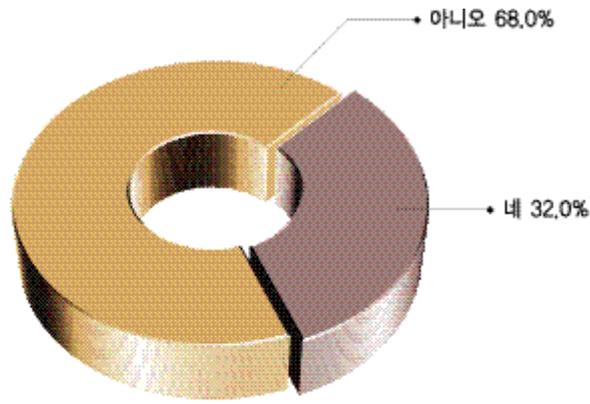
가)

가 , “ ” 가
 44.0% 가 “ ” “
 ” 가 32.0% , “ ” “
 ” 24.0% 가
 가 가 ,

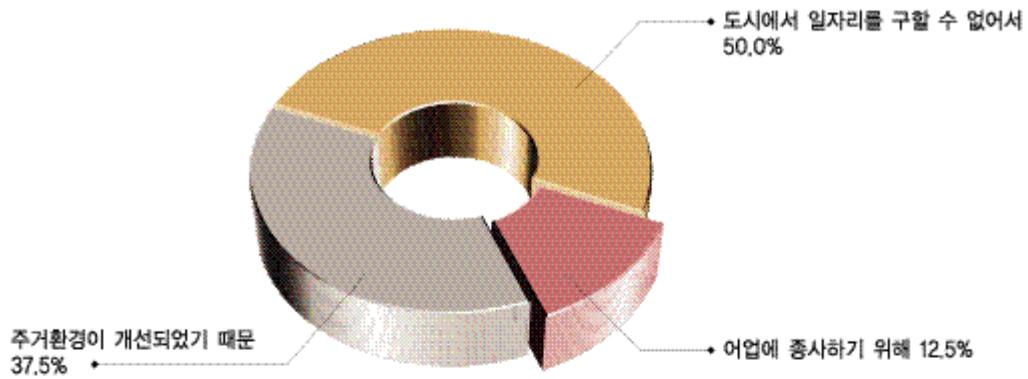


가 , 20 ~ 40 가 가
 68.0%가 , 가
 32.0%

가 ,
 “ 가 50.0% ,
 “ ” “ 가 37.5% ,
 12.5% 가

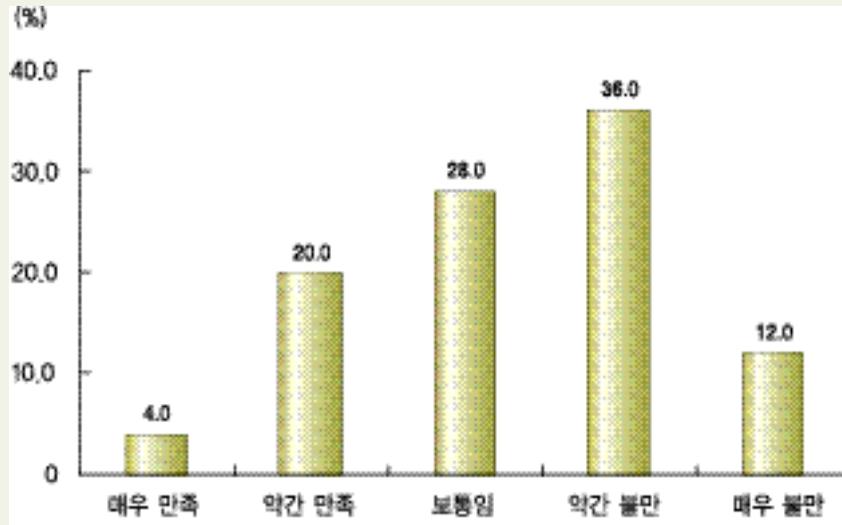


4-2. 가

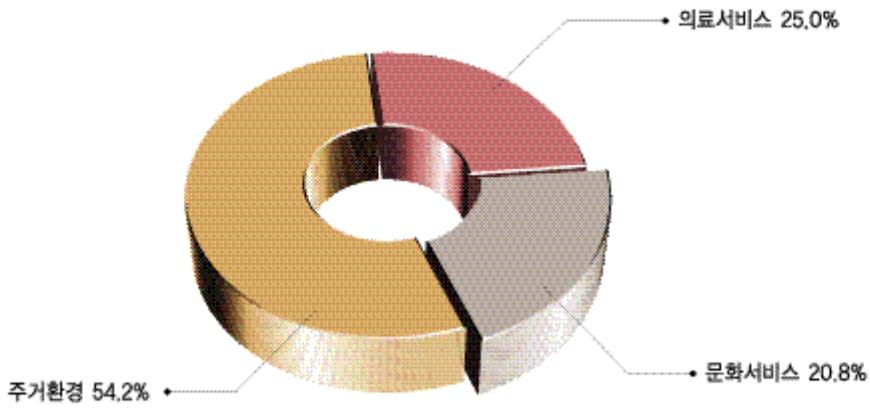


4-3. 가

가 가 ,
 “ ”
 , “ ” 가 48.0% 가
 , “ ” 가 28.0% ,
 24.0% .
 가 , .



4-4.

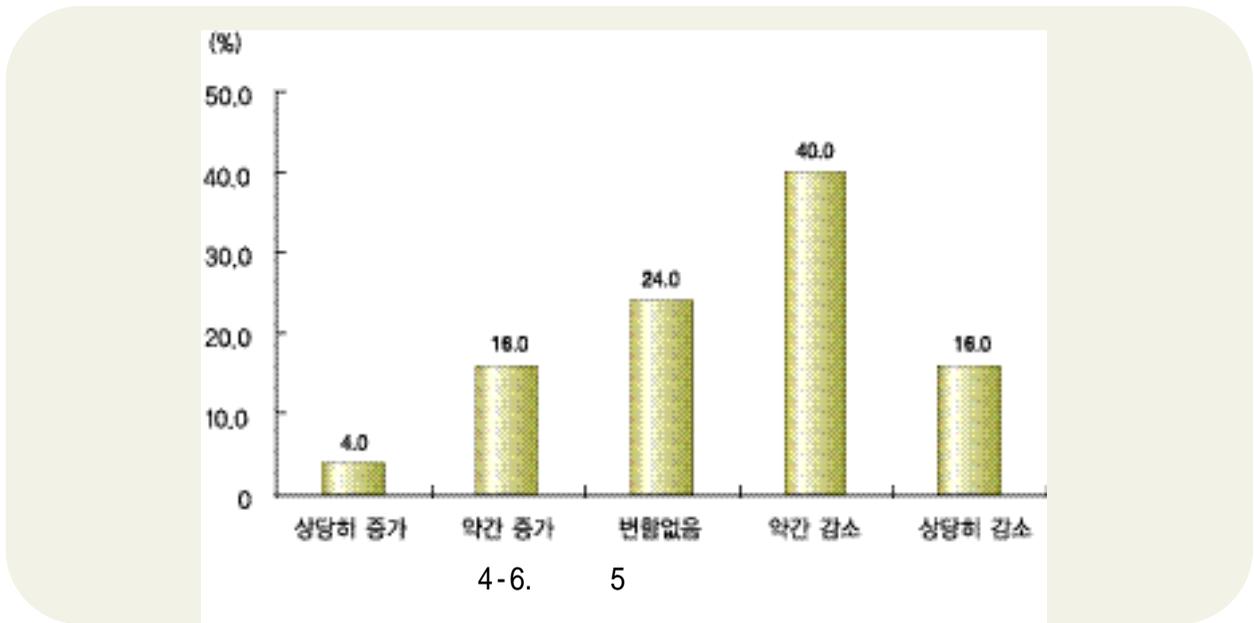


4-5.

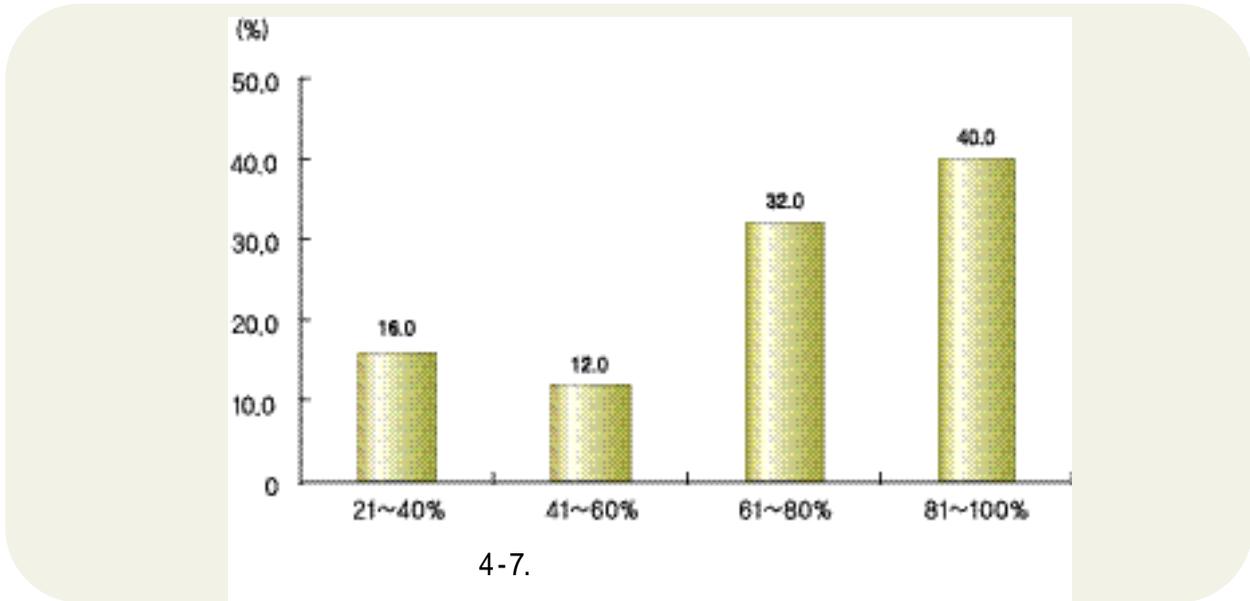
가 . 가
 “ ” 54.2%가
 “ ” 25.0% ,
 “ ” 20.8% .
 가 가 ,
 .

)

5 가 , , “ ” 16.0% ,
 40.0%가 “ ” , “ ” 24.0% , 가
 56.0% . 20.0%

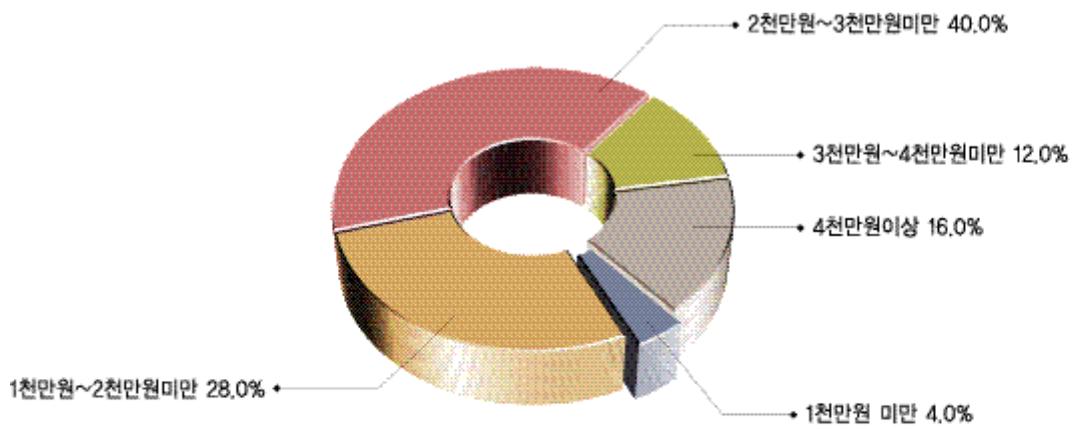


40.0%가 “ 81~100%” ,
 “ 61~80%” 32.0% ,
 72.0% .
 EEZ
 가 ,
 가



4-7.

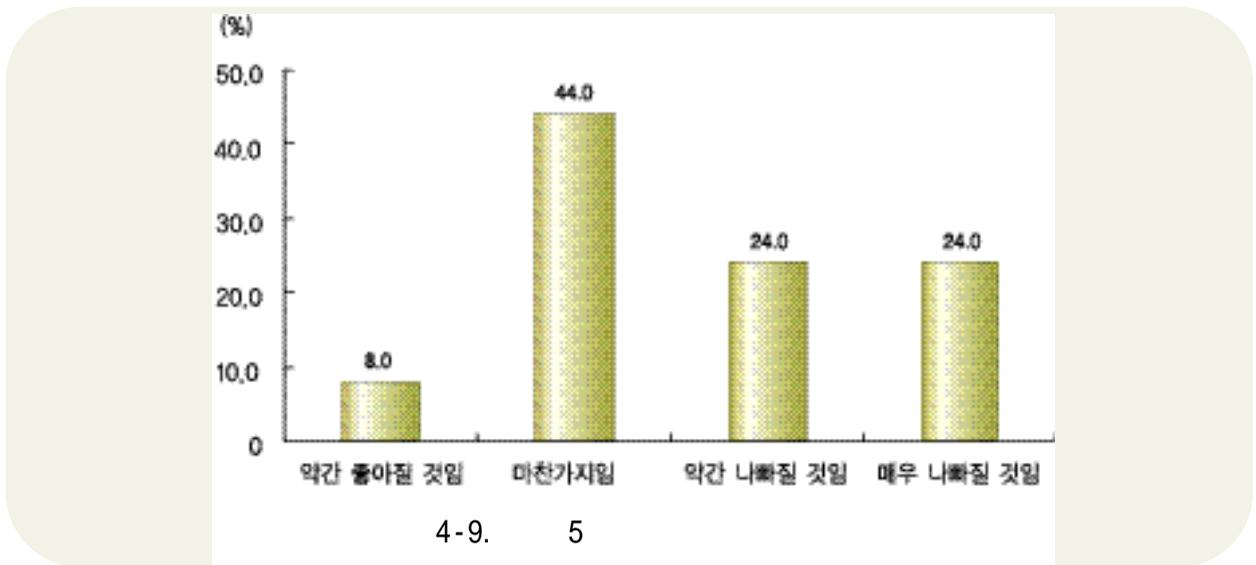
가 , “ 2 ~ 3 ” 40.0% 가 , “ 1 ~ 2 ” 28.0% .



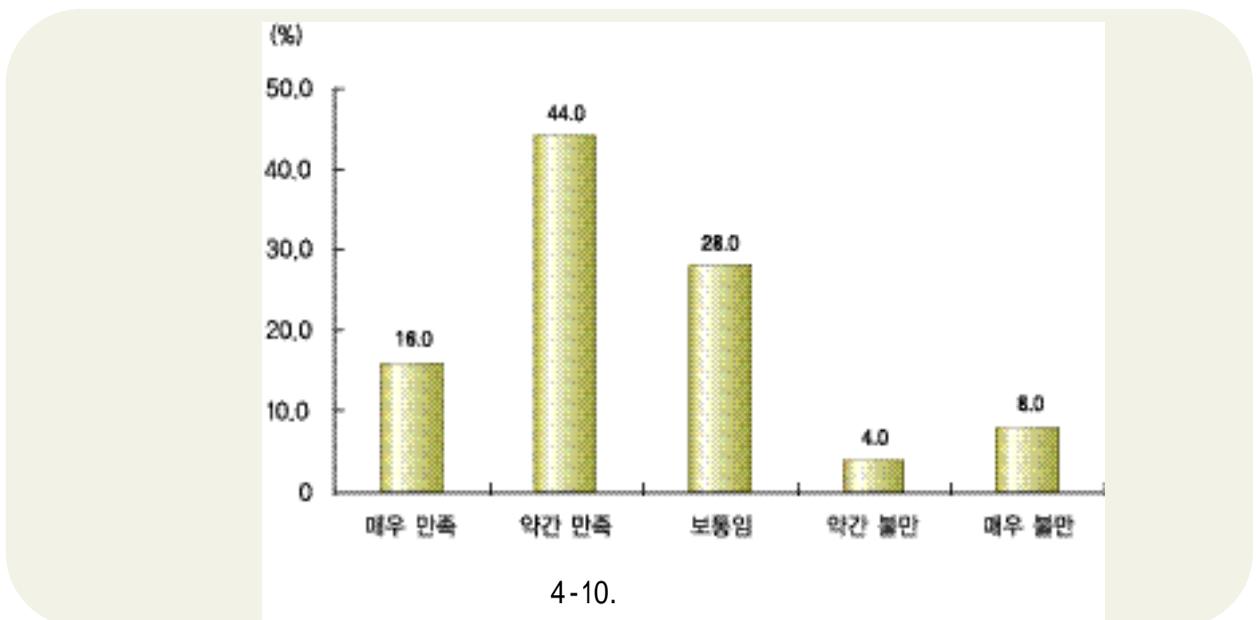
4-8.

” “ ” “ 48.0% ,
 44.0% , 가 ” 가 8.0% .

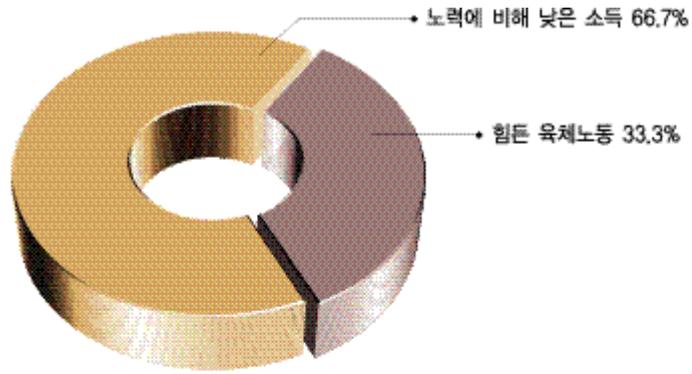
5



60.0% , “ ” , 28.0% .
 12.0% ,

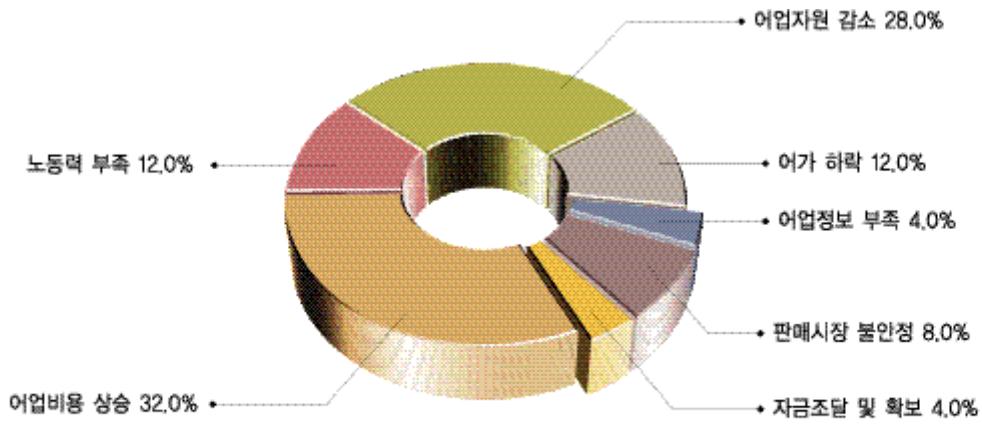


66.7% “ ” , “ ”
 33.3% , 3D



4-11.

3 32.0%가“
 ” , “ ” 28.0% . “
 ” “ 가 ” 12.0% , “
 ” 8.0% .

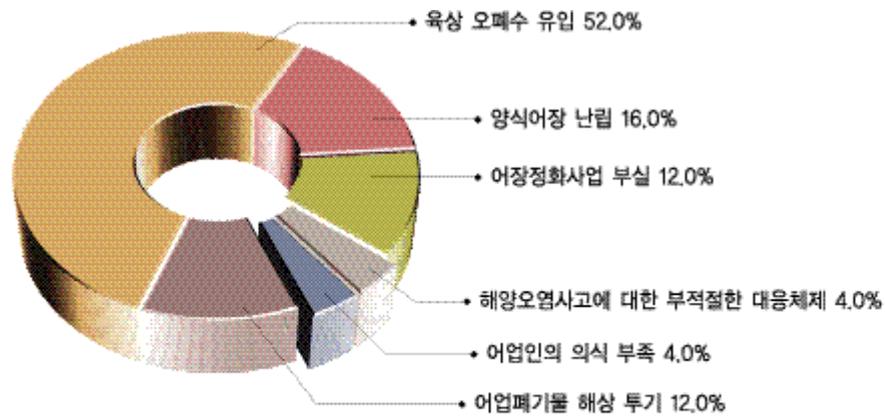


4-12. (3)

가 ,

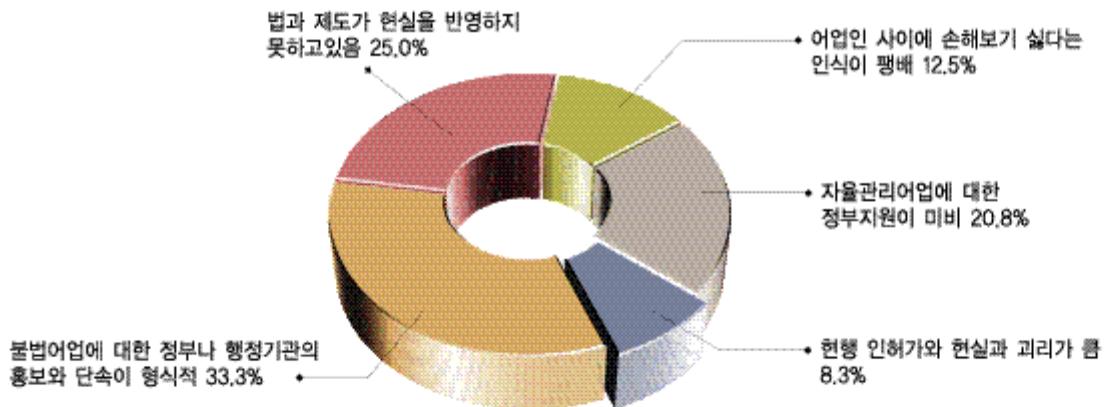
)

가 (52.0%)
 “ ” 16.0%
 “ ” “ ”
 12.0%
 가



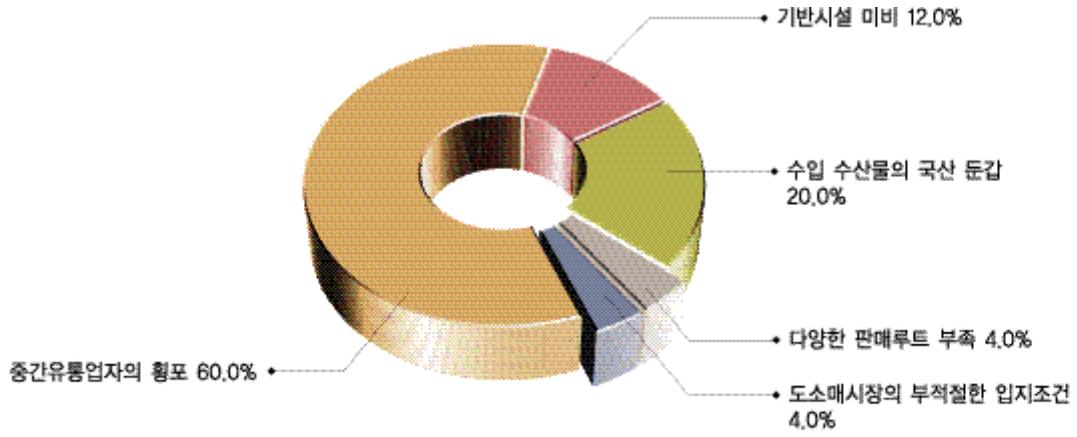
4-13.

가 가 , 가
 “ ” (33.3%)
 “ ? ” 25.0%
 “ ”
 20.8% ,



4-14.

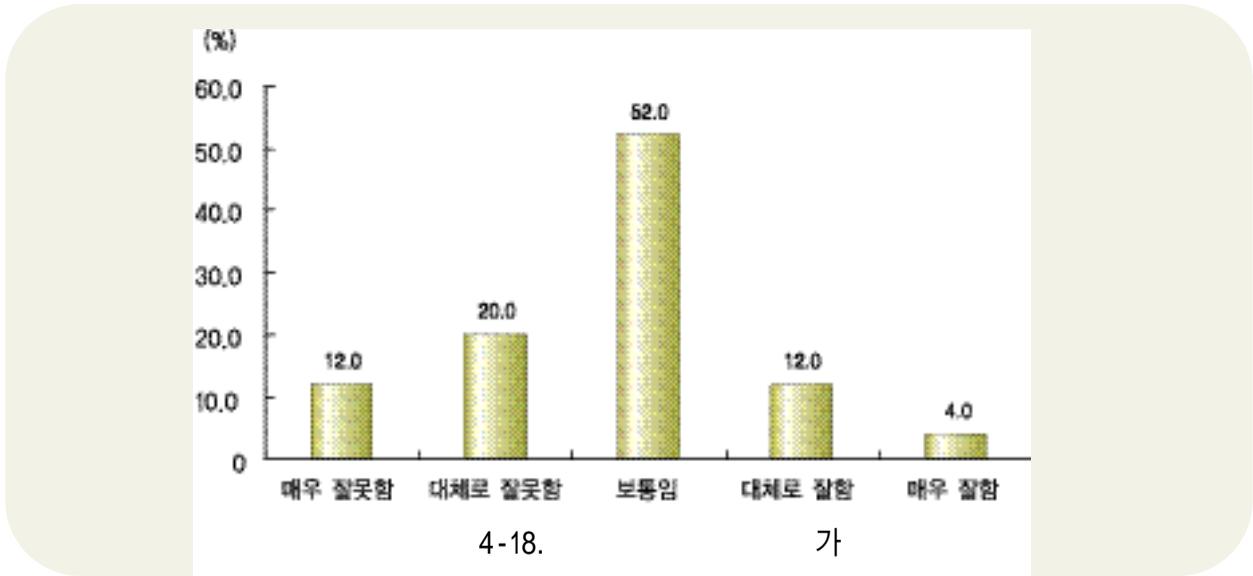
가 “ ”
 60.0% 가 , “ ”
 20.0% .



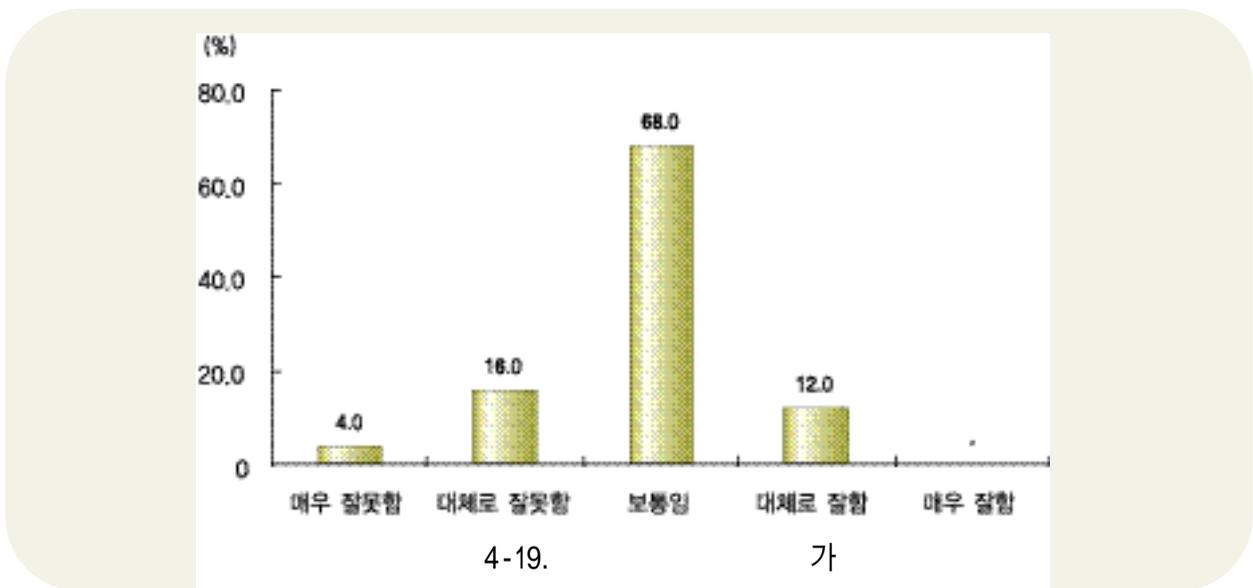
4-15.

가 가 ,
 (WTO, WTO)
 WTO (,)
 가 , “
 ” 56.0% ,
 56.0% . “ ” “ ”
 32.0%,
 12.0% .
 WTO

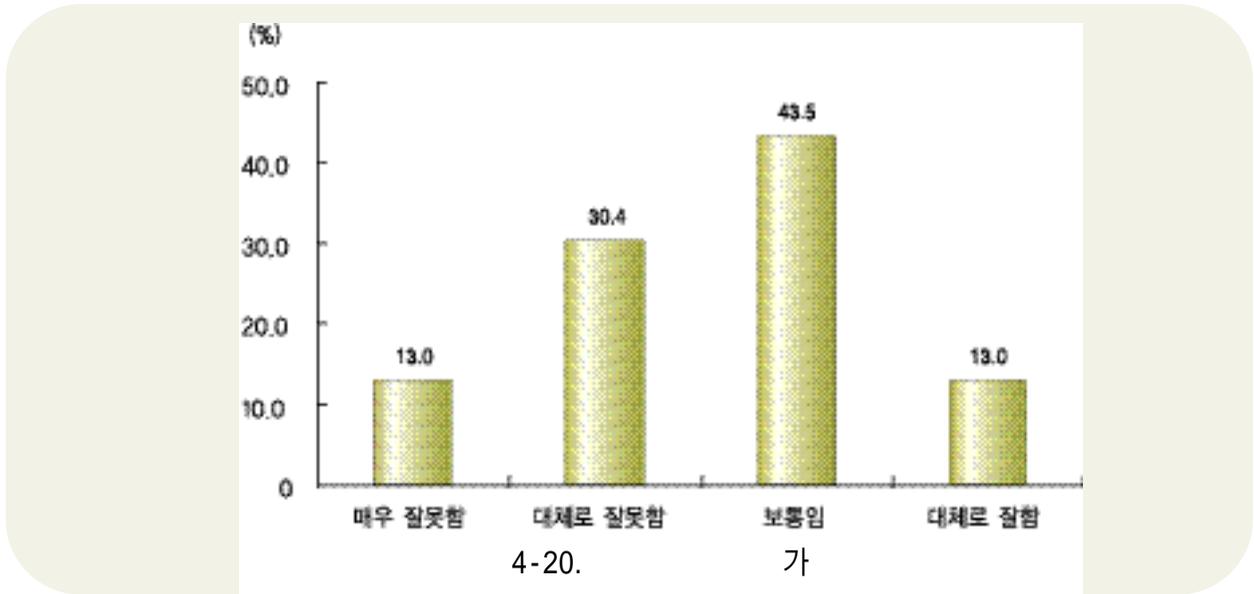
가 “ ” 가가
 52.0% . 가 가 32.0% ,
 16.0% .
 가
 가 , .



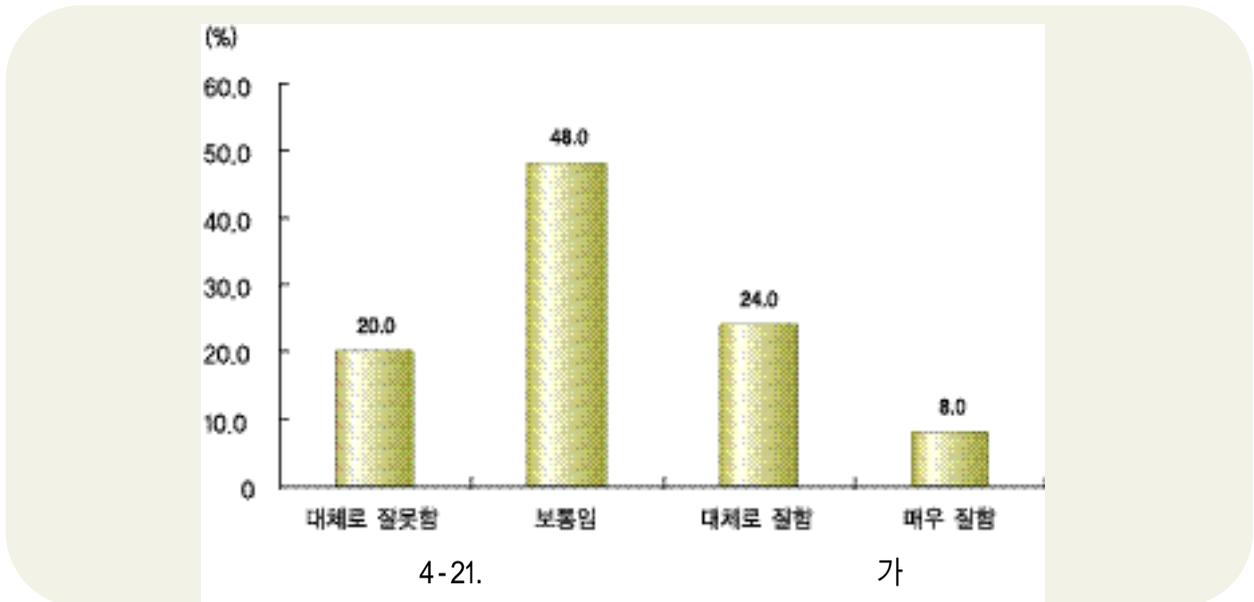
“ ” 가 68.0% 가 .
 “ ” 가 20.0%,
 “ ” 가 12.0%



가
 1980
 “ 43.5% 가 “
 ” 30.4%, “ ” 13.0% , “ ” 13.0% .
 가
 가

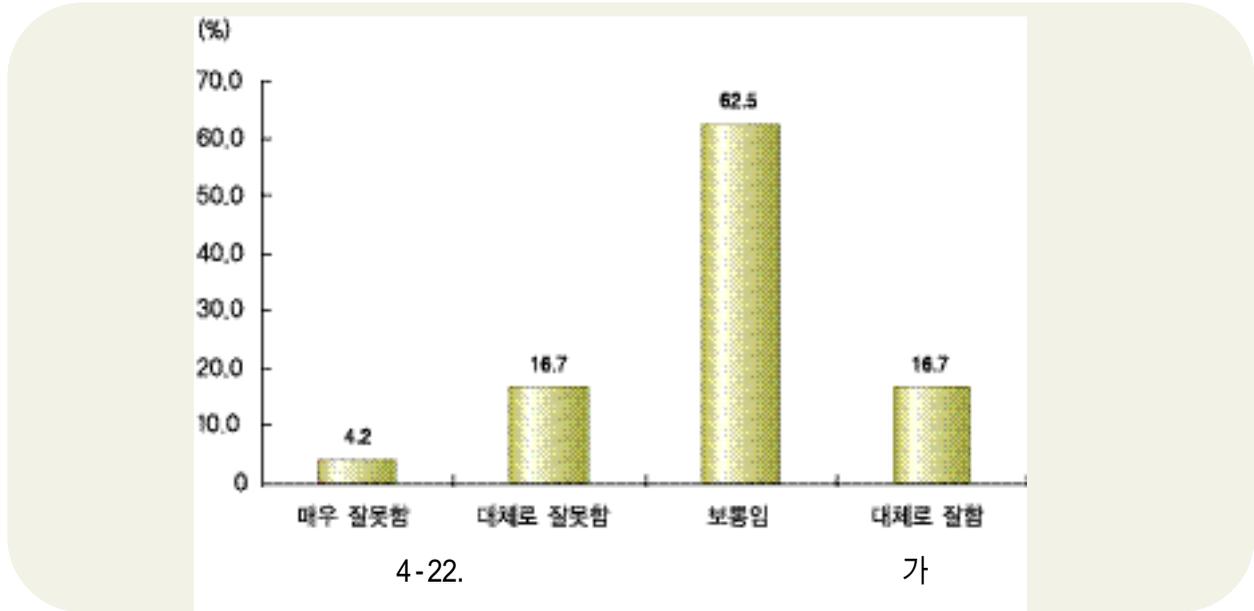


“ ” 가 가 48.0% . “
 ” “ ” 가 가 32.0% . “ ”
 가 20.0% .

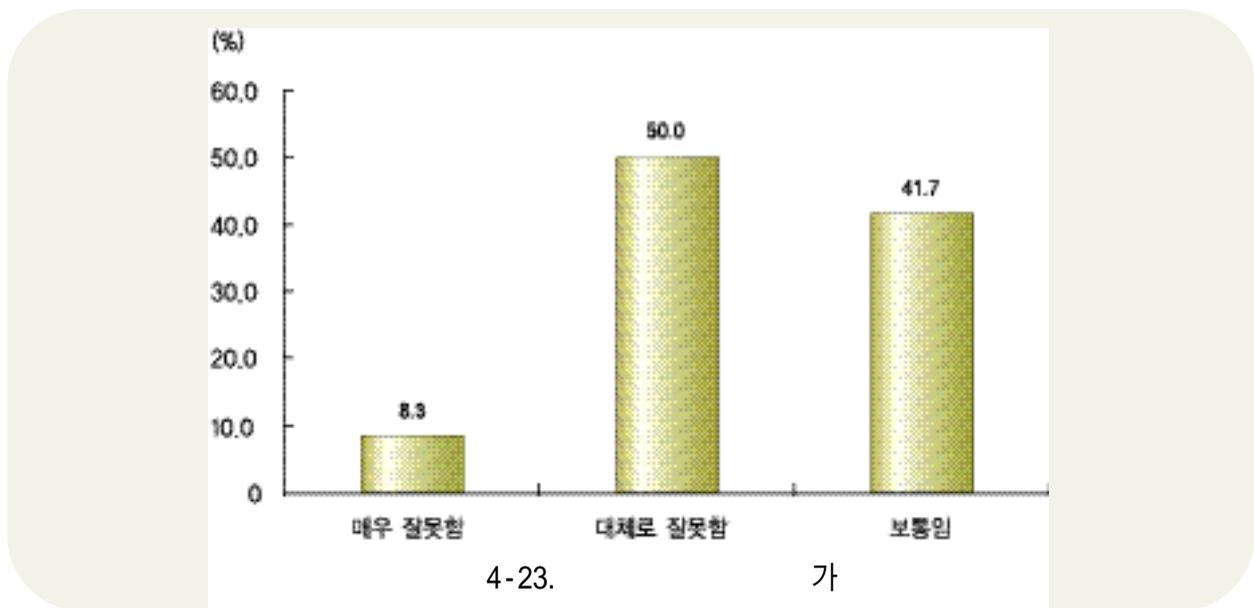


“ ” (62.5%) 가
 20.9% , 가 16.7% .

가 .



가 50.0% “ ”
 , “ ” 8.3% . 가 가 , “ ” 가 58.3%
 41.7% .



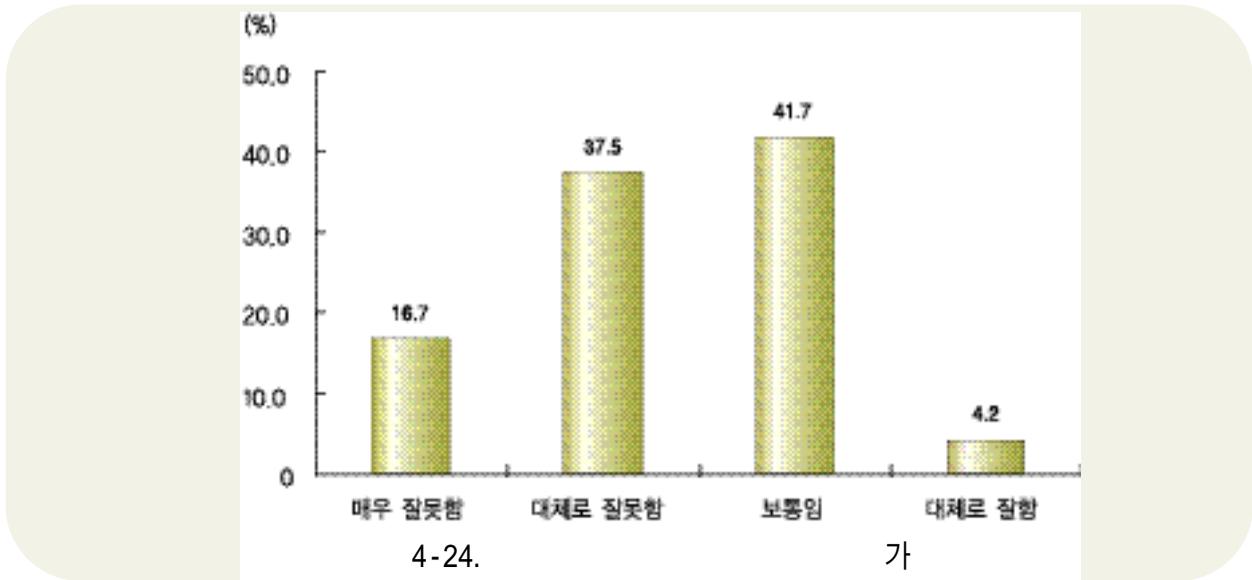
WTO

FTA

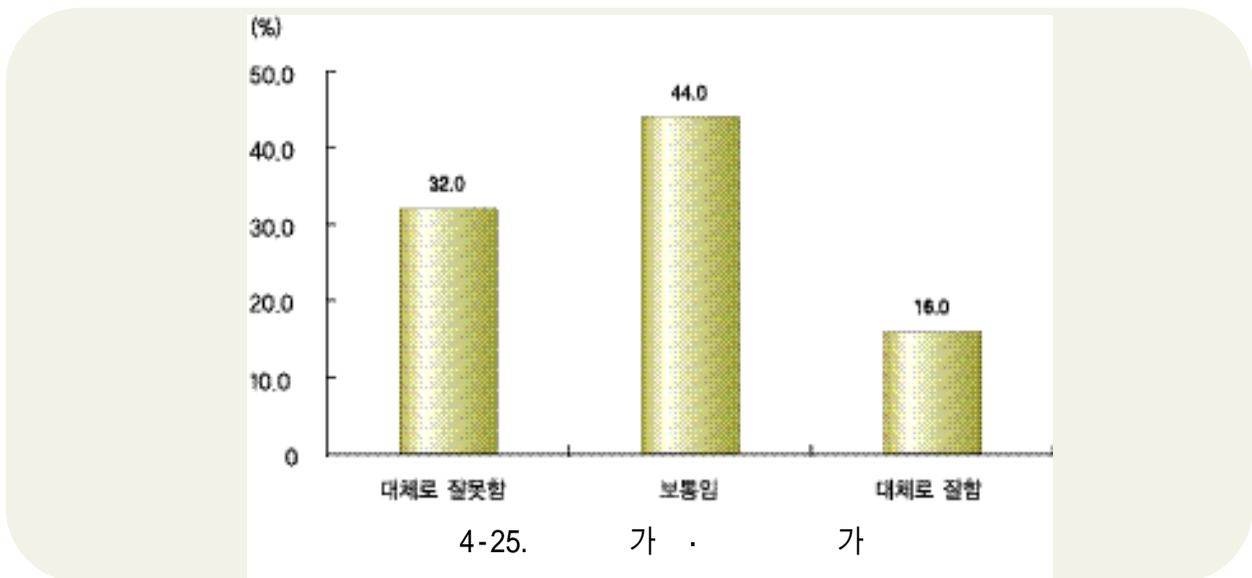
가

가

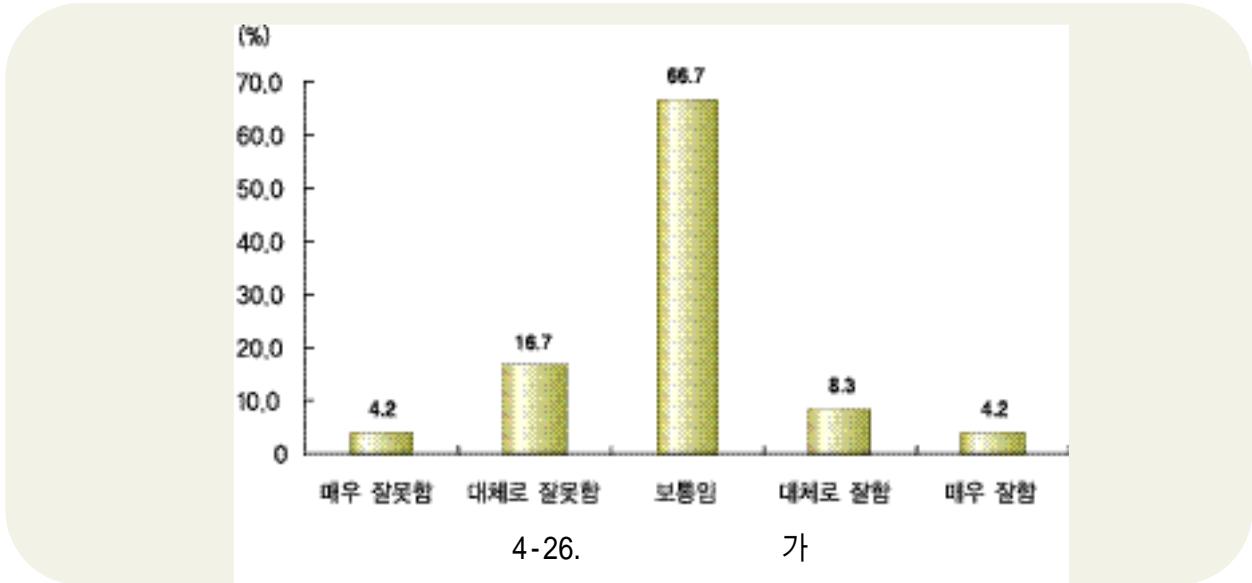
“ ” 가 37.5%, “ ” 16.7% ,
 54.2% “ ” 가 “ ” 가
 41.7% , “ ” 가 4.2%
 가



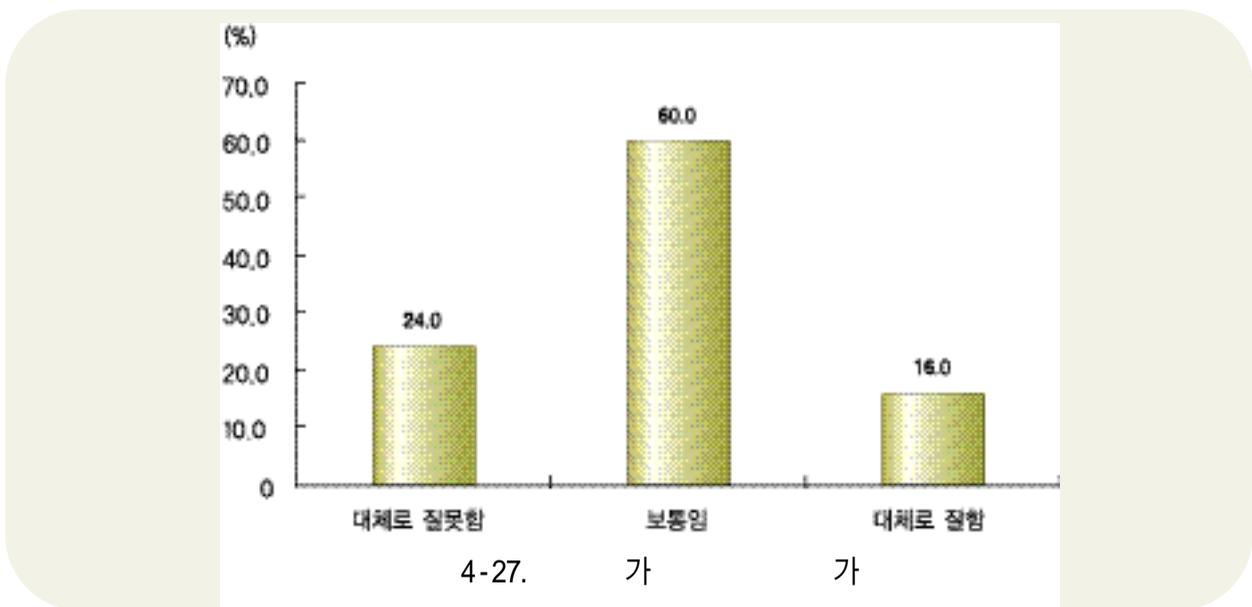
가 . 44.0%가 “ ”
 “ ” 가 32.0% “ ” 가
 16.0% . 가
 가 “ ” “ ” .



“ ” 가 66.7% 가
 “ ” 20.9% ,“
 ” 가 12.5% .
 가 , 가
 “ ” 가



가 가 ,“ (60.0%) 가
 “ 가 24.0% ,“ ” 16.0% .
 가
 가

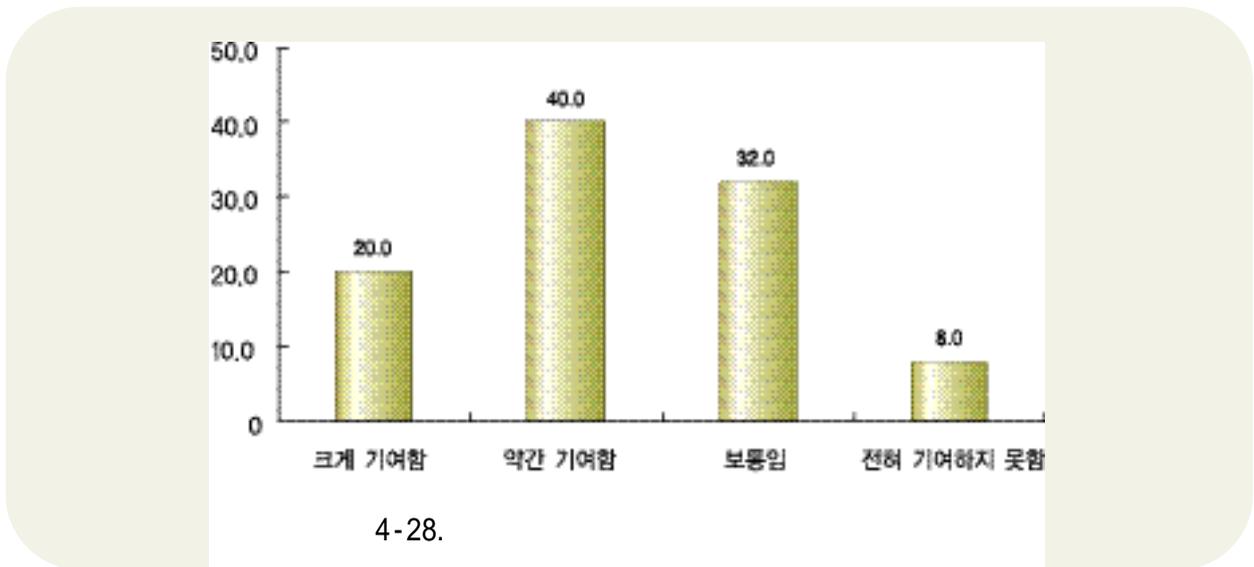


2)

가 , , 가

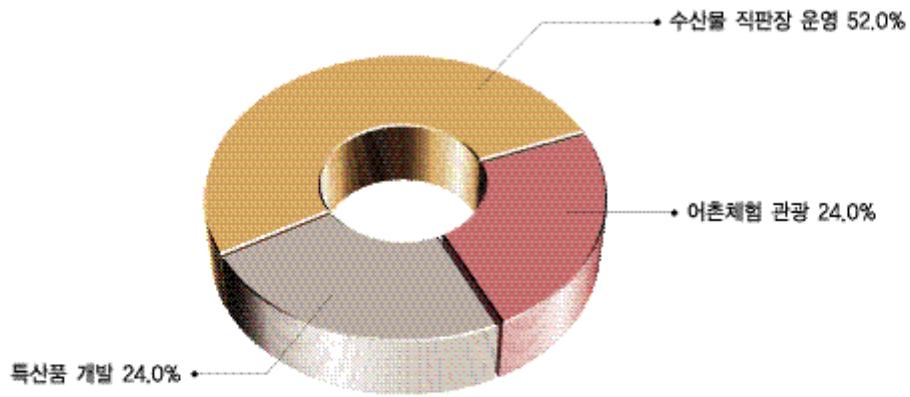
가)

“ 가 20.0% “ ” 가
 40.0% , 60.0% 가
 “ ” 가 32.0% , “ ” 가
 8.0% , 60%



가

52.0% “ ” “ ”
 “ ” 24.0% 가

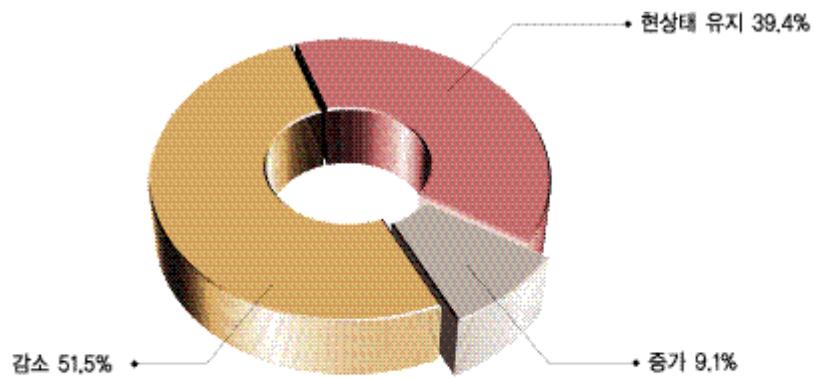


4-29. 가

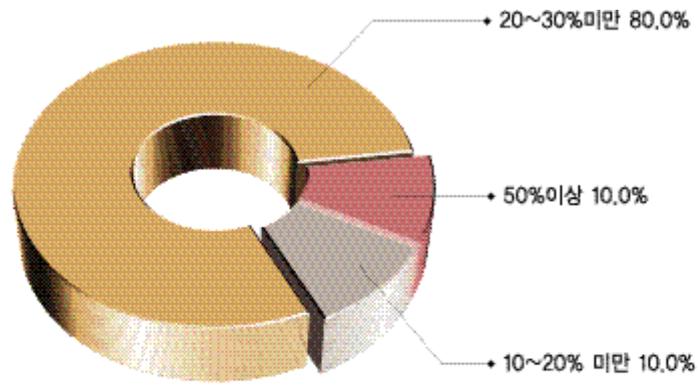
) 가

가

“ ” 51.5% 가
 “ ” 39.4% , “ 가 ”
 9.1% .
 가
 가 ,
 “ 20~30% ”
 80.0% 가 “ 50% ”
 가
 “ 10~20% ”
 가 10% .

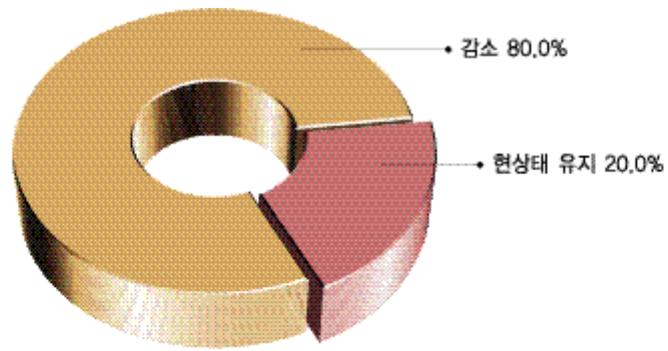


4-30.

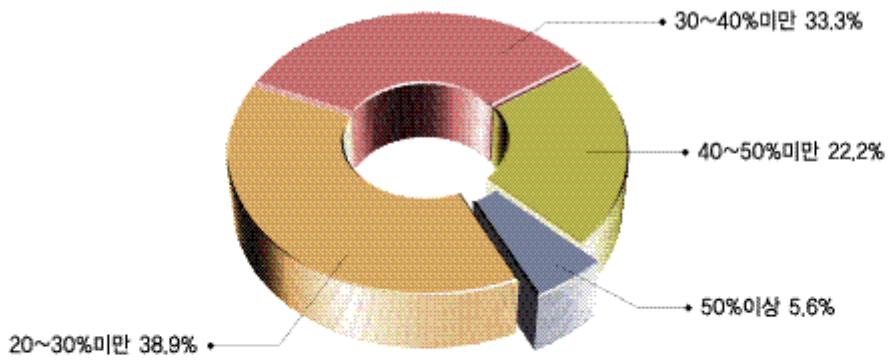


4-31.

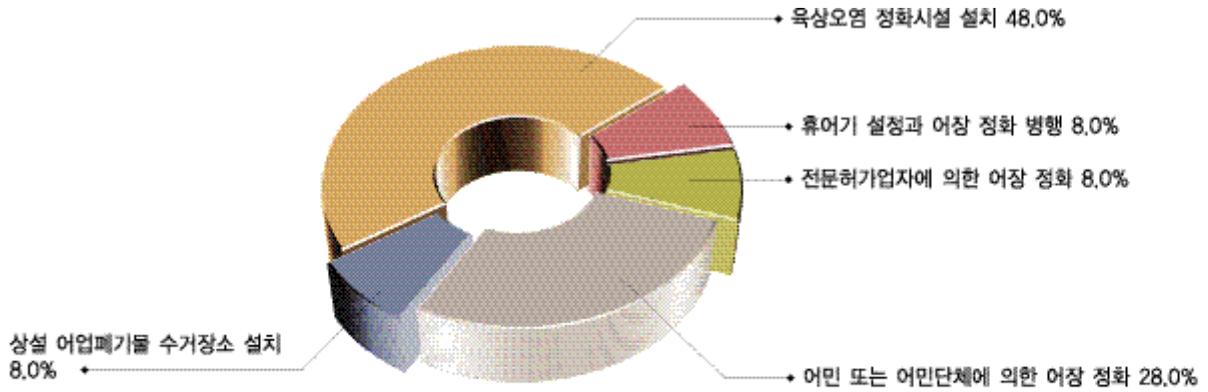
가
가 ,
“ (80.0%)
” 20.0%



4-32. 가

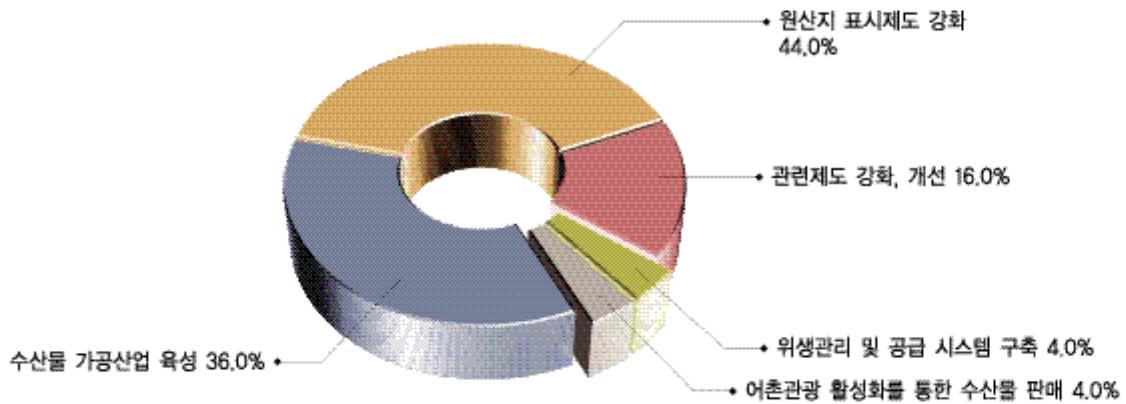


4-33. 가



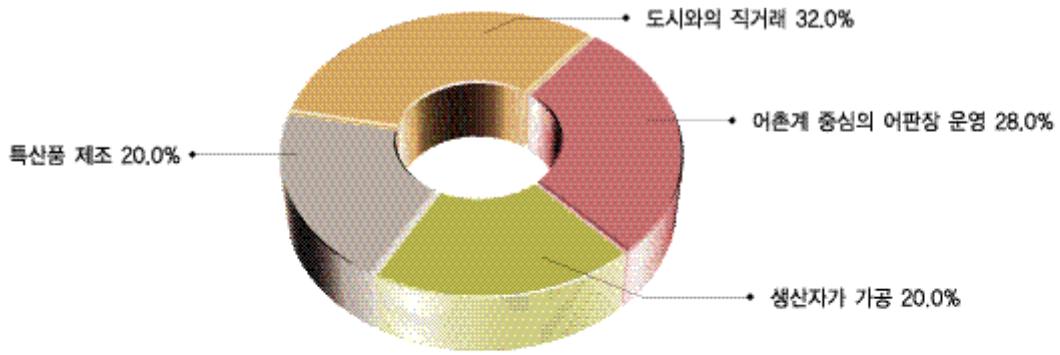
4-35.

가가 . 가
 “ , ” 40.0%
 가 “ 가 ” 36.0%
 “ , ” 16.0% , “
 ” “ ”
 4.0%



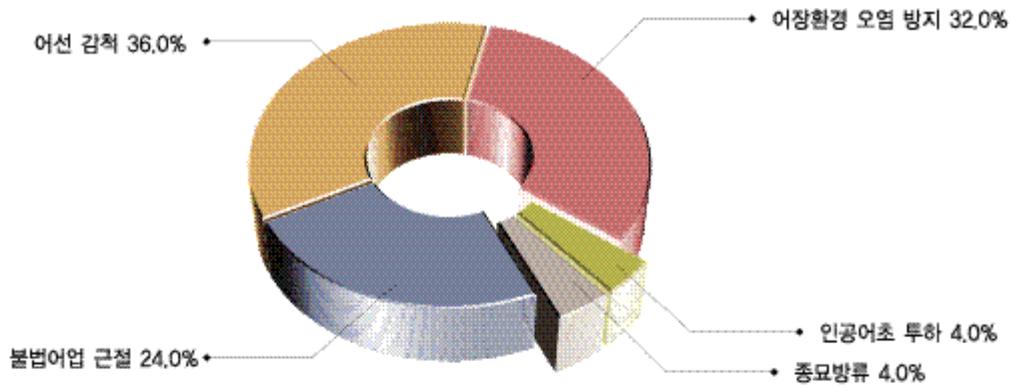
4-36.

가가 . ()
 가가
 가 32.0%가 “ ” , “
 ” 28.0% .
 가
 “ ” “ 가가 ” 20.0% .



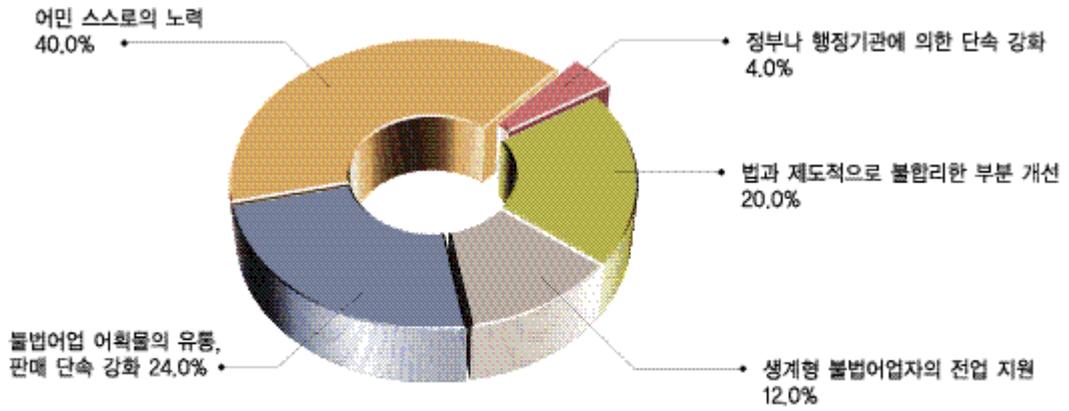
4-37. 가가 ()

“ (36.0%) 가
 “ ” “ ”
 32.0%, 24.0%



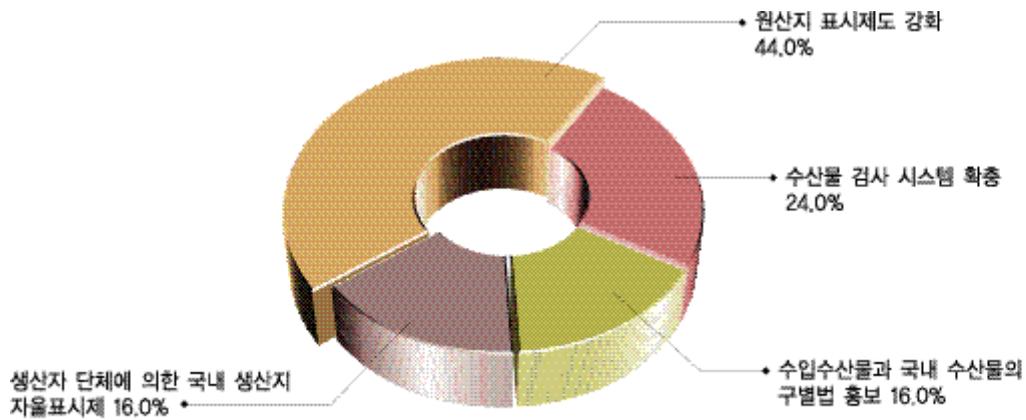
4-38.

가
 , “ (40.0%) 가 , “
 ” 20.0% 24.0% “



4-39.

가
 , 44.0% “ ” 가 ,
 “ ” 24.0% “ ”
 ” “ ” 16.0%



4-40.

)

가

가

가 ,

가

가

가

”

36.0%

“ 가

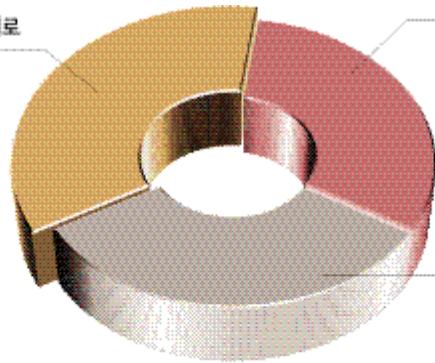
”

“ ”

32.0%

가

사업계획서 평가결과를 토대로
집중 투자 36.0%



고른 분산투자 32.0%

성장가능성이 있는 곳에 집중투자
32.0%

4-41.

가 가 가

가 ,

가

가

가 ,

”

21.3% 가

”

“ 가 /

14.9% ,

“

” 12.8%

11

가

2.1%

가

38.5%

30.8%

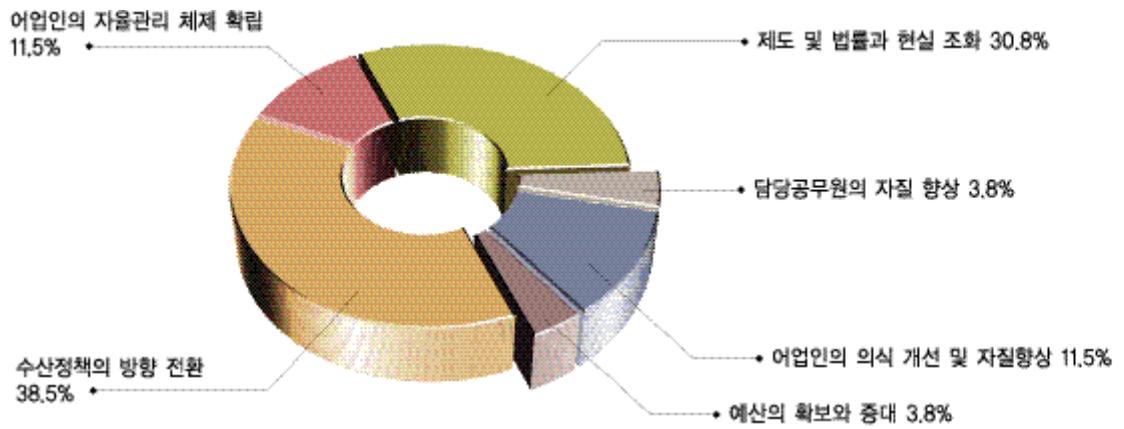
11.5%

가

4-16.

		(%)
	47	100.0
	10	21.3
	7	14.9
	2	4.3
	3	6.4
	6	12.8
	5	10.6
	2	4.3
가 .	4	8.5
	7	14.9
	1	2.1
가	-	-

:



4-42.

Korean Coastal and Offshore Fishery Census

2004 12 5

2004 12 20

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