

학령기, 학령전기를 중심으로한 어음청력검사용 한국어 단음절 어음표 조사

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ABSTRACT

The Research of Korean Monosyllabic Word Lists using Speech Audiometry for School & Preschool Aged Children

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Rather than the pure tone tests, speech tests are more appropriate for the school- and preschool- aged children to evaluate their communication abilities. In most major hearing testing facilities in Korea, there are no specific and standardized materials for the word recognition test of the school- and preschool- aged children. They utilized subjectively selected words out of adult test materials, simple naming or body pointing tests or newly developed materials such as Evaluation of Auditory Response to Speech-Korea (EARS-K) and Hallym University Word Discrimination test by Pictures (HU-WDP). Therefore, the development of new material is necessary and the characteristics of the existing materials should be investigated. In this study, we analyzed the word lists that are mostly used clinically in Korea in terms of the frequency of phonemes, familiarity, properness. Although there were differences among list, compared with phonemic frequency of the routine conversational speech the followings were found. The initial consonants and the vowels seem to included excessively with ‘ㄹ’ and ‘ㅈ’ for the school-aged children’s list and ‘ㄹ’ and ‘ㅋ’ for the preschool-aged children’s list. The vowels seem to included excessively with ‘ㅓ’ and ‘ㅕ’ for the school-aged children’s list and ‘ㅓ’ and ‘ㅕ’ for the preschool-aged children’s list. Most words seem to have final consonants while the percentage of the appearance of no final consonants in the conversational speech is 65%. The most frequently used final consonant was ‘ㄱ’, ‘ㄴ’ for the school-aged children’s list and ‘ㄱ’ for the preschool-aged children’s list. Considering limitation of the children’s words, the distortion of the phonemic frequency from the routine conversational speech seems inevitable. The familiarity of the lists were pretty good since 100% of words were rated with first grade in commonly used words except one word list that included 71% of the first graded commonly used words. Conclusively, all these factors should considered the development of the new standardized word lists for the school- and preschool- aged children in Korea.

KEY WORDS : Word recognition test for the school and preschool aged children · Frequency of phonemes · Familiarity.

INTRODUCTION

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phonetically balanced kindergarten word lists, PBK-50¹³⁾ Word Intelligibility by Picture Identification Test, WIPI¹⁶⁾ 2002 (Hallym University Word Discrimination test by Pictures, HU-WDP²⁾ Word Intelligibility by Picture Identification(WIPI)¹⁵⁾

(1962) 11) (1962) 11) EARS- K(Evaluation of Auditory Response to Speech-Korea)¹⁵⁾ HU- WDP(Hallym University Word Discrimination test by Pictures)²⁾

친숙도 분석

(3- 5) (6~ 12)

“ ” 508,710 ”1)

10~ 15% 9)

1968 2000

14

7

237,990 , 1 4

Table 2 . 5 , 6 , 7

MATERIALS AND METHODS

음소 빈도수 분석

RESULTS AND DISCUSSION

음소 빈도수 분석

Table 1.

		1
Hahm	25	2
	× 4	3
		4
SS	20	1
	× 3	2
		3
EARS-K	35	1
		2
HU-WDP	40	1
		2
		3
		4
Body point	7	1

*Hahm (1962), SS, EARS-K (2004), HU-WDP (2002)

3) 4)5)

Table 2.

1,845	1,839	1
4,245	6,084	2
8,358	14,442	3
19,337	33,819	4

171, 824

Table 3.

(%)	(%)	(%)
12.8	22.4	[] 64.9
1.8	4.3	2.2
10.5	1.1	12.1
8.3	0.1	2.3
1.8	11.5	6.2
8.2	4.1	3.7
6.3	4.4	0.8
4.3	1.0	7.7
0.4	9.9	
9.0	1.5	
2.0	0.2	
15.2	0.6	
7.9	0.8	
0.9	7.0	
2.3	0.8	
1.1	0.0	
1.5	0.5	
1.1	0.7	
4.7	11.7	
	1.4	
	16.0	

(Table 3).

Table 1

(Table 4 and Fig 1). (1962)

11) “ ”, “ ”

, 7 “ ”

“ ” “ ”

“ ” “ ”

(Fig. 2).

(Table 5 and Fig. 3).

“ ” “ ”

“ ”

“ ” “ ” “ ” “ ” “ ”

“ ” “ ”

“ ” “ ”

(Fig. 4).

Table 4.

Hahm	24	8	12	12	12	8	0	20	24	4	28	4	16	16	0	4	4	4	8
SS	4	3	1	4	2	0	3	6	2	5	1	0	3	1	3	3	3	3	2
EARS-K	5	2	1	3	0	0	3	7	1	4	0	1	1	0	4	2	0	0	2
HU-WDP	6	1	1	3	1	0	4	5	0	2	1	2	3	0	3	3	1	3	1
Body point	1	0	1	0	0	0	0	2	0	1	0	1	0	0	0	1	0	0	0
Norm	28	4	24	20	4	0	12	8	0	20	4	32	16	0	4	4	4	4	12

*Norm 4)

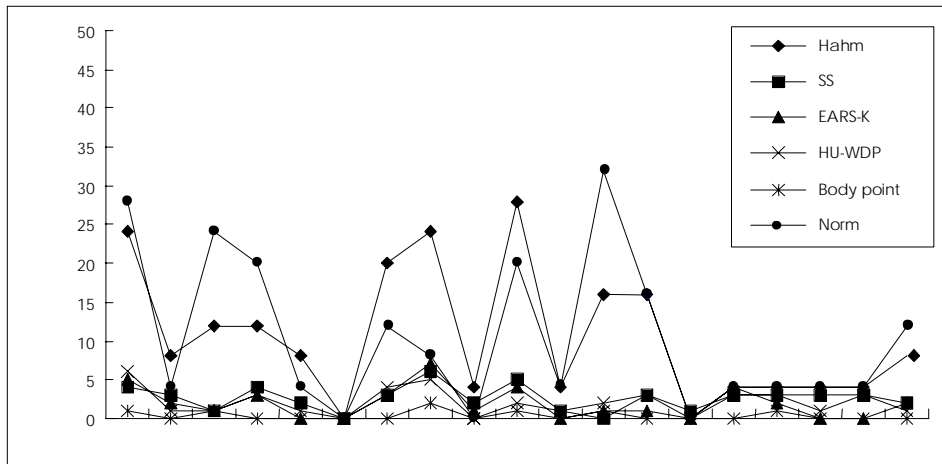


Fig. 1. *Norm 4)

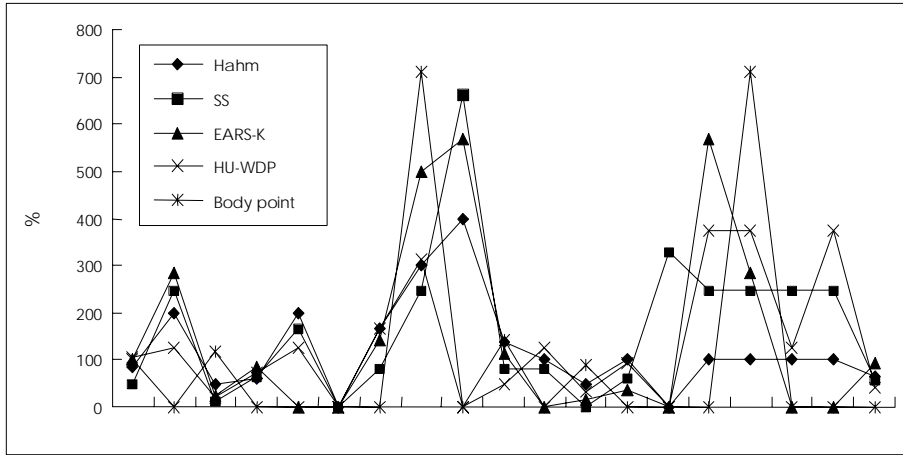


Fig. 2.
*Norm

4)

(%).

100%

Table 5.

Hahm	44	12	2	0	20	2	12	0	32	4	0	4	0	24	0	0	4	4	24	0	20
SS	12	4	0	0	5	1	3	0	10	0	0	0	0	7	0	0	0	1	1	0	5
EARS-K	8	4	1	0	2	0	1	0	8	0	0	0	0	6	0	0	1	1	1	0	3
HU-WDP	9	5	1	0	4	0	0	0	9	0	0	0	0	4	0	0	2	0	0	0	6
Body point	1	1	0	0	0	0	0	0	2	0	0	0	0	1	0	0	1	0	0	0	1
Norm	44	8	4	0	24	8	8	4	20	4	0	0	0	16	0	0	4	0	24	0	32

*Norm

4)

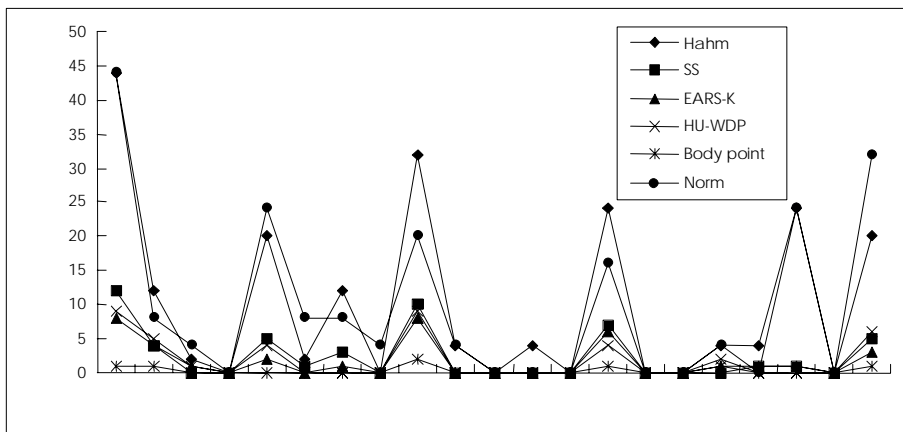


Fig. 3.

4)

*Norm

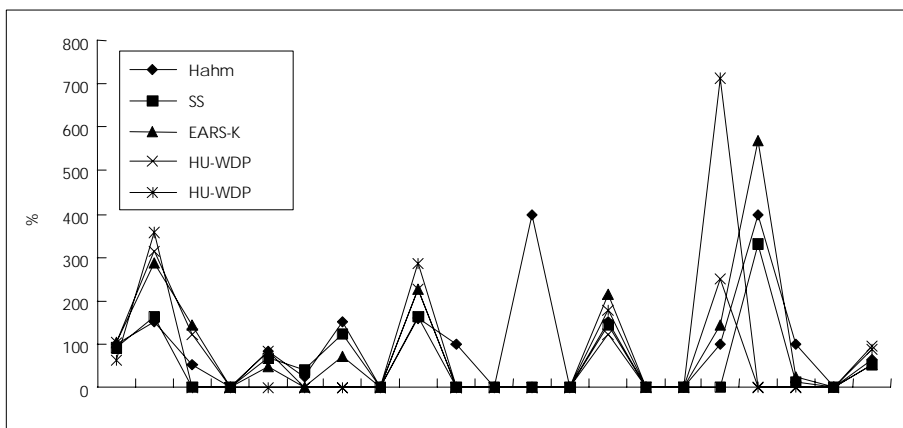


Fig. 4.
*Norm

4)

(%).

100%

Table 6.

[]									
Hahm	24	28	20	28	36	32	12	20	
SS	0	5	8	4	11	9	4	8	
EARS-K	5	5	5	2	6	4	4	5	
HU-WDP	8	6	4	0	8	7	3	4	
Body point	3	0	2	0	1	0	1	0	
Norm	88	8	24	12	20	16	8	24	

*Norm
* []

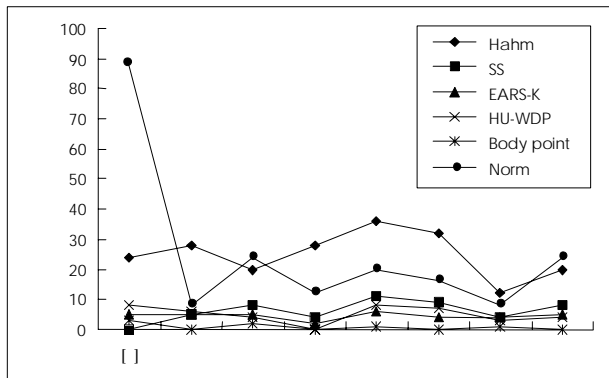


Fig. 5. *Norm 4)

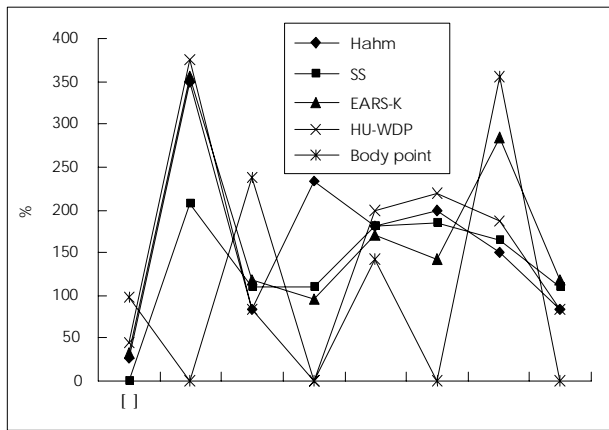


Fig. 6. (%). *Norm 4)

Table 7.

Hahm	
SS	-
EARS-K	
HU-WDP	
Body point	

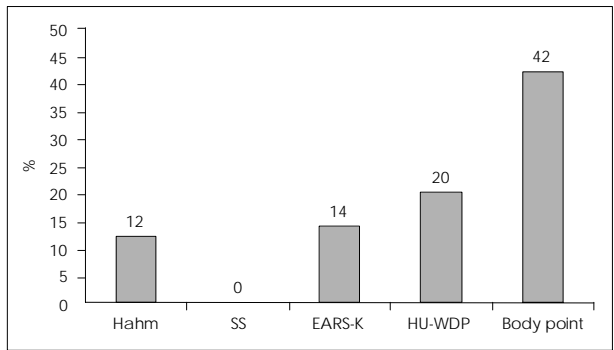


Fig. 7. (%)

(Table 6 and Fig. 5).

“ ” “ ”

(Fig. 6).

친숙도 분석

“ ” 1)

Table 8 and 9 Fig 8

“ ” 1)

1

100% 1 (1962)

17.6% (Table 7 and Fig. 7).

11) 71% 1

(1962) 11)

Table 8.

		(%)	
		1	142 (71)
Hahm	50 x 4	2	37 (18.5)
		3	9 (4.5)
		4	7 (3.5)
			5 (2.5)
			42 (84)
SS	20 x 3	2	6 (12)
		3	1 (2)
		4	1 (2)
			0
			31 (88.6)
EARS-K	35	2	3 (8.5)
		3	0 -
		4	0 -
			5 (2.5)
			37 (92.5)
HU-WDP	40	2	3 (7.5)
		3	0 -
		4	0 -
			0 -
			0 -

Table 9.

		(%)	
		1	6 (100)
Body point	7	2	0 -
		3	0 -
		4	0 -
			0 -
			0 -

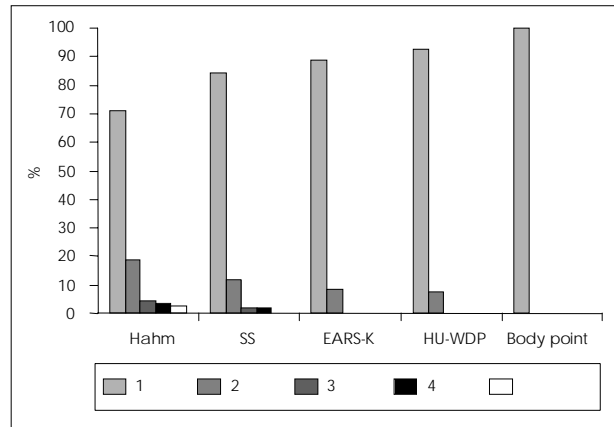


Fig. 8. (%)

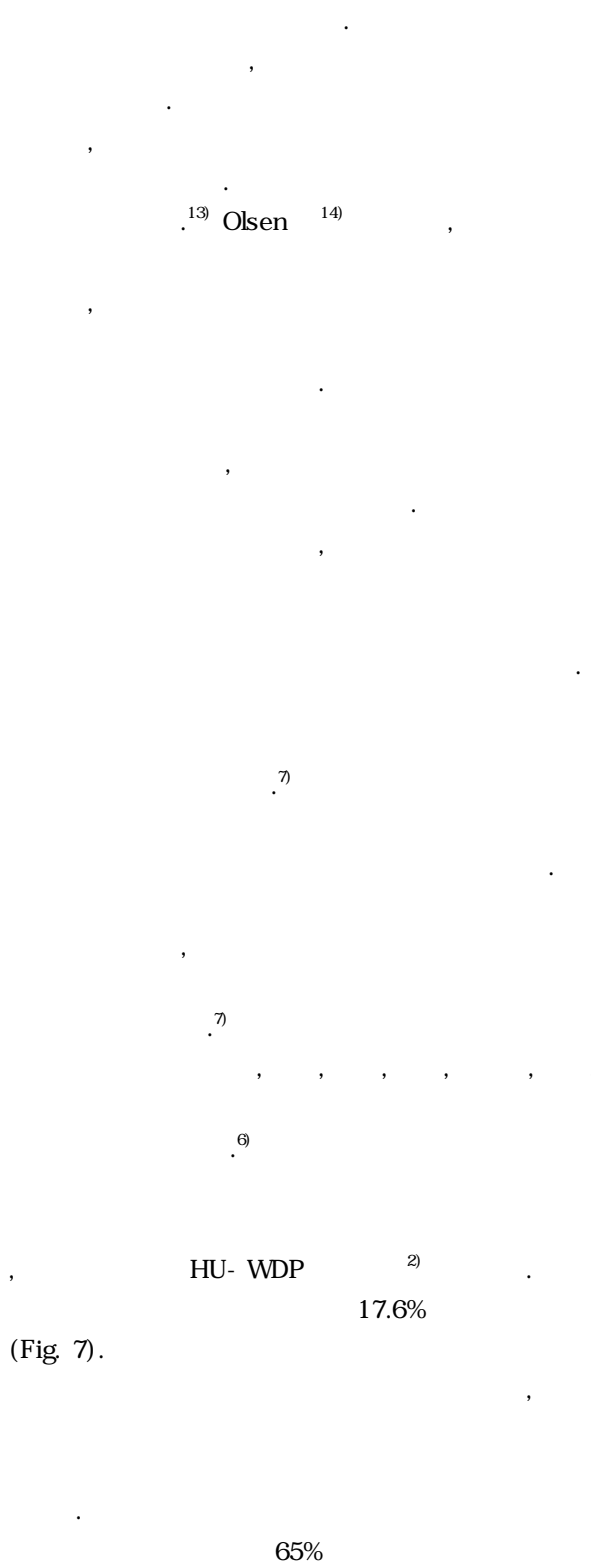
4
 4
 1
 87.2%
 (Table 8 and 9). Bell ¹²⁾

(1962) ¹¹⁾

EARS- K

15) 1, 2

Word Intelligibility by Picture
 Identification(WIPI)¹⁶⁾ HU-
 WDP²⁾



(Fig. 7).

중심 단어

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부 록

Table 10.

O1()

Table 11.

O2()

Table 12.

L()

Table 13.

O1	15	2	5	9	2	0	5	11	2	10	3	12	8	1	8	2	1	0	4
O2	11	3	7	7	2	0	8	13	2	11	1	14	4	1	2	3	3	4	4
L	10	2	9	8	4	0	7	8	2	8	2	16	8	2	2	2	2	4	4
Norm	28	4	24	20	4	0	12	8	0	20	4	32	16	0	4	4	4	4	12

*Norm 4)

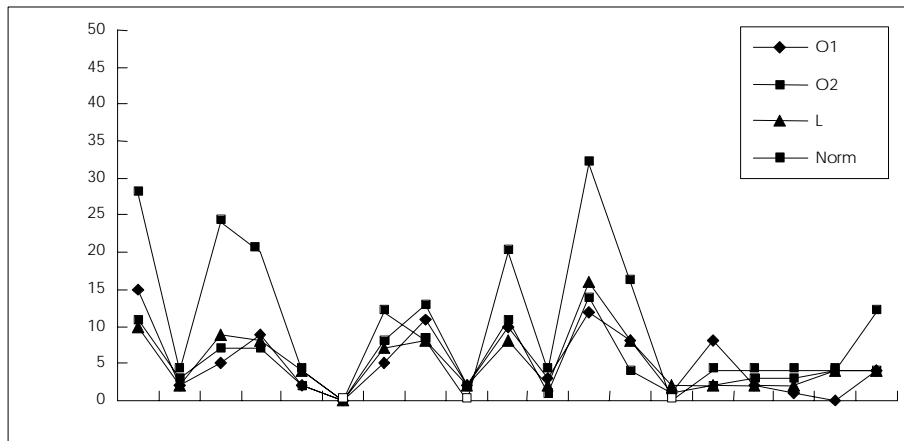


Fig. 9. *Norm

4)

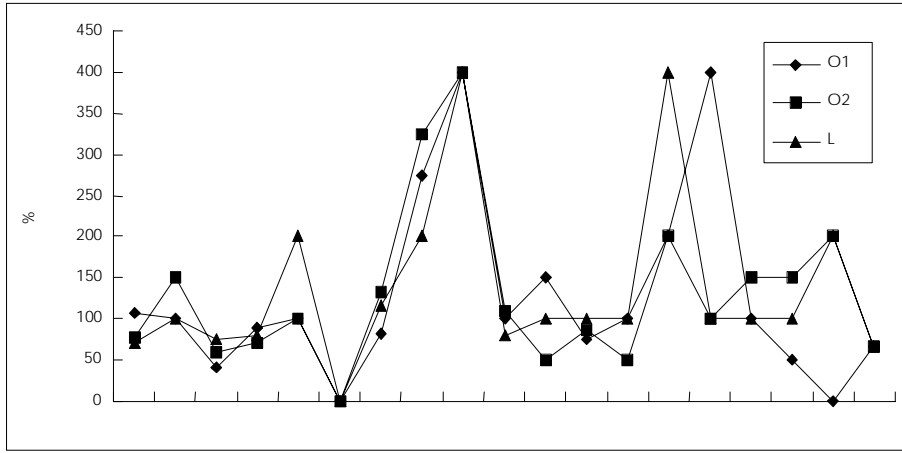


Fig. 10. (%) . *Norm 4) 100%

Table 14.

O1	20	7	1	0	14	1	6	0	15	3	0	1	1	9	1	0	0	3	7	0	11
O2	27	5	2	0	6	2	4	0	18	1	0	0	0	15	2	0	4	1	2	0	11
L	27	6	2	0	7	2	8	0	16	1	1	0	0	5	2	0	2	2	4	0	15
Norm	44	8	4	0	24	8	8	4	20	4	0	0	0	16	0	0	4	0	24	0	32

*Norm 4)

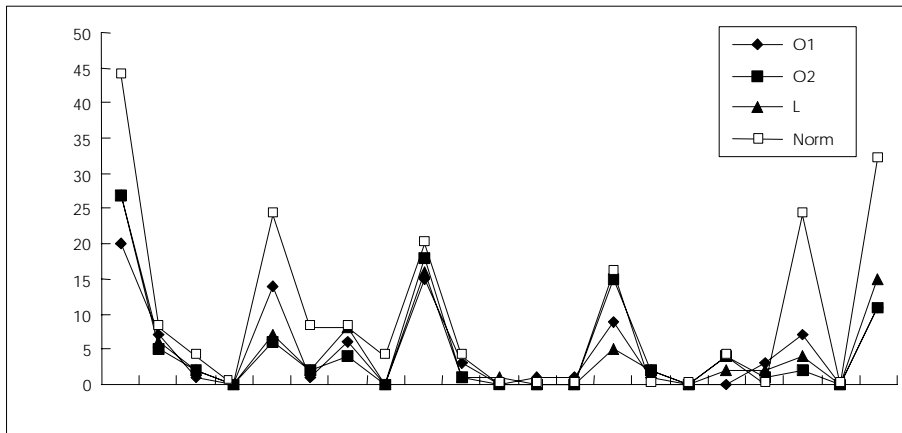


Fig. 11. (%) . *Norm 4)

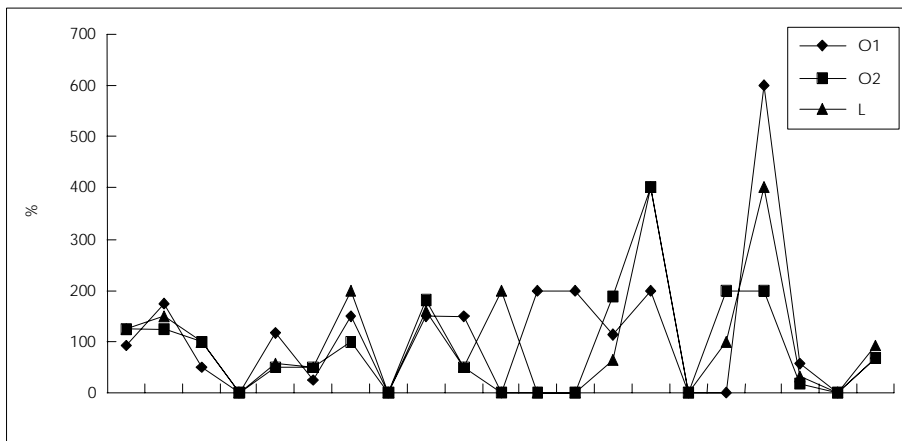


Fig. 12. (%) . *Norm 4) 100%

Table 15.

	[]								
O1	15	17	13	10	13	14	7	11	
O2	21	11	8	10	24	8	9	9	
L	24	8	12	11	13	10	8	15	
Norm	88	8	24	12	20	16	8	24	

*Norm 4)
* []

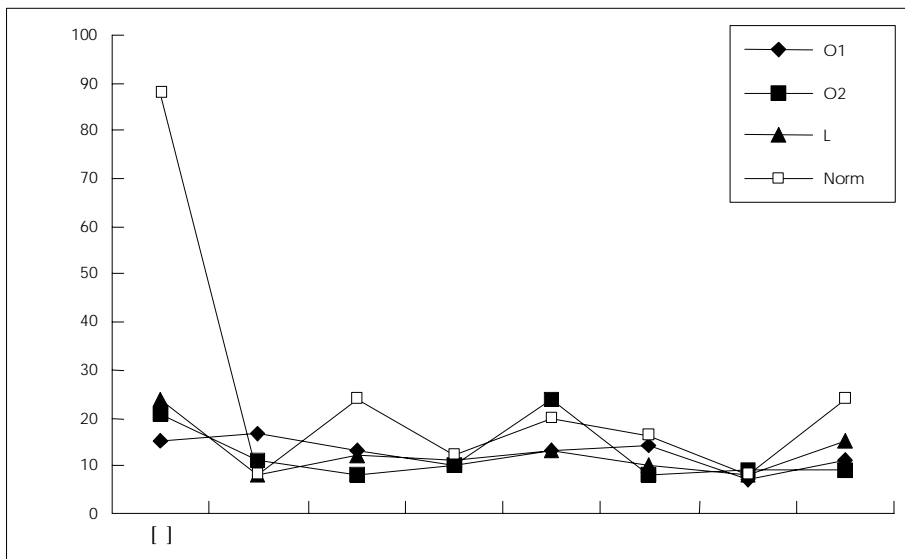


Fig. 13.
*Norm 4)

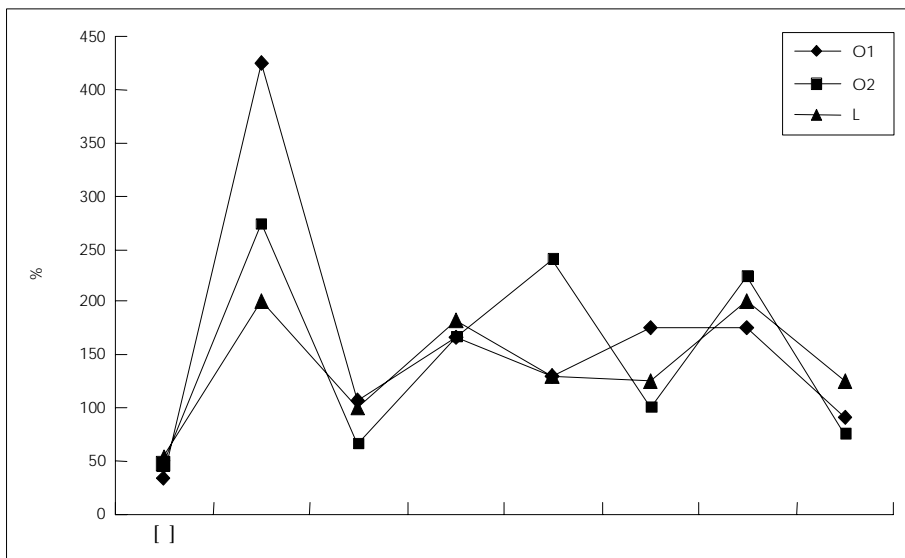


Fig. 14.
(%) *Norm 4)
100%