

익산지역 수원지의 불소함량에 관한 조사연구

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=Abstract=

A Study on Fluoride Content in the Reservoirs Of Iksan Region

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This study was carried out to collect basic dates on fluoride intake from drinking water, and the apperance of mottled teeth after taking samples form 5 selected waterways from Iksan region 's reservoir to the filtration plant for examination of the fluoride content.

The results are as follows.

1. It indicatied that from Hoojung reservoir $2.17 \pm 0.95\text{ppm}$, Bulsan reservoir $1.93 \pm 0.23\text{ppm}$ and Yoolso reservoir $2.19 \pm 0.10\text{ppm}$.
2. Significances were found between Shinhung reservoir $2.57 \pm 1.22\text{ppm}$ and Uhwoo reservoir $0.80 \pm 0.55\text{ppm}$.
3. Except for the Uhwoo reservoir, the remaining 4 reservoir exceeded the standard fluoride content of 0.50-1.00ppm. For the residents in the region where they use natural water with fluoride content exceeding the standard 1.00ppm as their drinking water and the apperance of mottled teeth should be carried out.

목 차

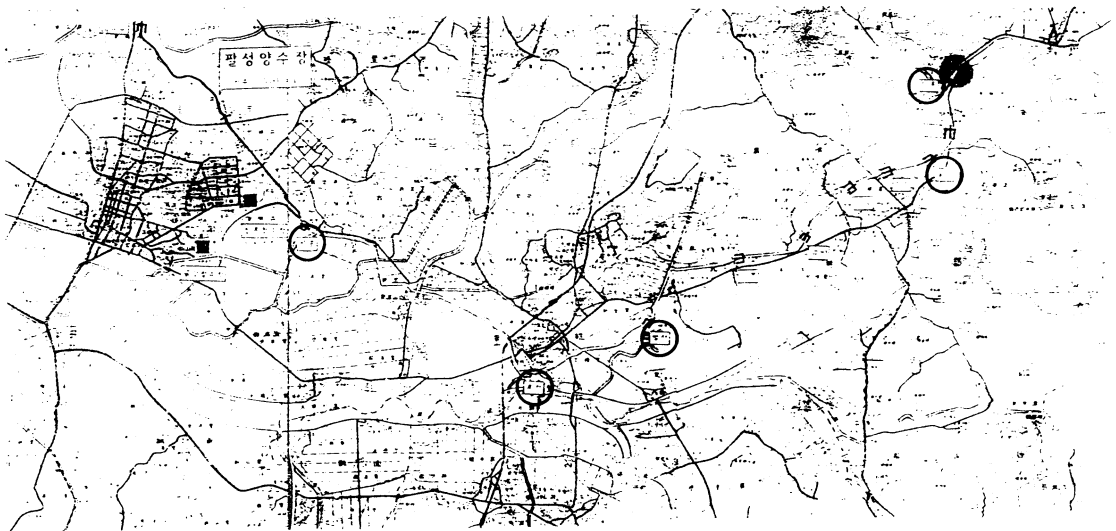
I. 서론

가 가
1802 가 19
가 20
가

1.

음료수 불소이온농도	섭취기간	영향
0.00ppm	수년	우식증발생증가
1.00ppm	수년	우식증예방
2.00-10.00ppm	수년	우식증예방, 반점치발생
13.00-53ppm	8년이상	골경화증, 위장장애 반점치 발생

가 0.50 1.00ppm 1.00ppm
1.00ppm 가 1.00ppm
가 1945 가 1.00ppm
가 60% 가 90 60%
가 가
93.5%



1.

, 1 4mg 2.17ppm, 1.93ppm,
2.19ppm 2.57ppm
0.80ppm
1.00ppm pH 5.88-6.44

5

2.

(Unit : ppm)

수 원 지	F	pH
후정저수지	2.17 ± 0.95 ^{ab**}	5.88
별산저수지	1.93 ± 0.23 ^{ab}	6.06
울소저수지	2.19 ± 0.10 ^{ab}	6.19
신흥저수지	2.53 ± 1.22 ^a	6.15
어우저수지	0.80 ± 0.55 ^b	6.44

- 1) Mean ± SD of triplication
- 2) Mean with the same lettered superscripts within a column are not significantly different at the * p < 0.001, ** p < 0.005 level by Duncan's range test.

II. 실험재료 및 방법

1. 채취지역

1

2. 채취기간

1997 9 1 9 30

3. 채취방법

1L plastic 0.1N-HCl

2

4. 분석방법

Lanthanum Alizarine Complexon
620nm

5. 통계처리

SAS Series Package ANOVA,
DMRT

IV. 고 찰

가

가

가

가

가

가

III. 실험성적

< 2 >

1981

1982
0.8ppm

V. 결 론

5

5

1. $2.17 \pm 0.95\text{ppm}$,
 $1.93 \pm 0.23\text{ppm}$,
 $2.19 \pm 0.10\text{ppm}$
2. $2.57 \pm 1.22\text{ppm}$
 $0.80 \pm 0.55\text{ppm}$

5
가
2.17,
0.80ppm
4
1.0ppm
가
2.57ppm
2.19,
1.93,
1.00ppm

4
0.5 1.00ppm
1.0ppm

1.0ppm
가
가
10.00ppm
가
1.00ppm
5
가
2.00ppm
가
4
4

참 고 문 헌

가 1 2
4.0mg
(23-50) 1 1.5
1 0.5mg
1.5mg 1/3
가 1
1/2dmf
4

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