

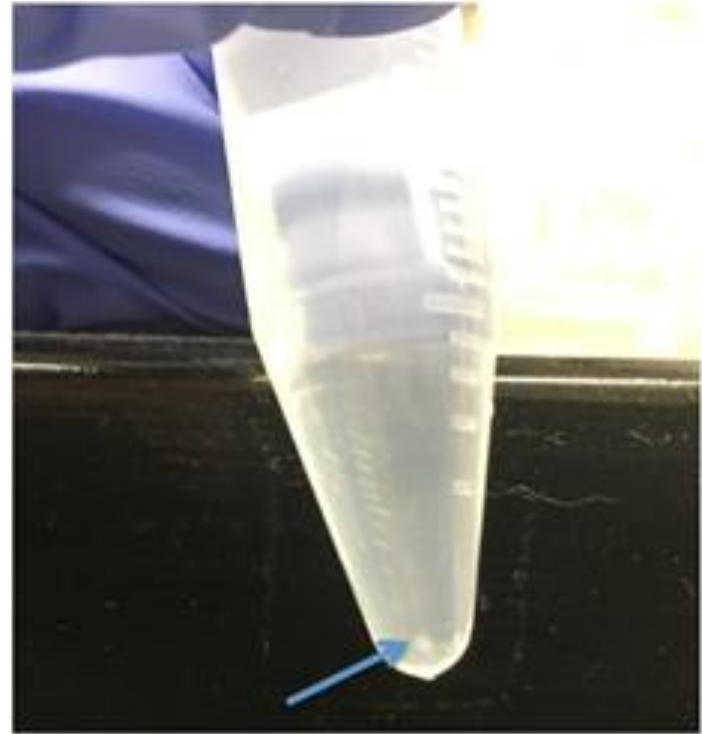
후와산(Huwasan) 효과

청고병(*Ralstonia solanacearum*)
예방효과



청고균(*Ralstonia Solanacearum* UW 763)

- 청고균 분리 후 물에 침지



청고균(4×10^5 CFU/ml)

후와산 투입 Vs 청고균 배양

후와산 투입 : 20,40,60,80 ppm

- 후와산 투입 (20,40,60,80ppm)
- 대조구 : 후와산 투입 하지 않음
- 총 96시간 동안 확인



대조구 : 96시간 동안 청고균 배양

Huwa-San (ppm commercial product)

Treatment	30m	1h	2h	4h	8h	24h	48h
80 ppm	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth
60 ppm	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth
40 ppm	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth
20 ppm	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth	Dilution: No growth Enrichment: No growth
0 ppm CTL	8.67x10 ⁷ ***						

*** The untreated control sample was plated after 4 hour time point due to time restrictions, so the bacteria had multiplied

- 후와산 투입한 샘플의 시간별 청고균의 농도 측정
- 20ppm 이상의 후와산 농도에서 청고균의 증식이 확인 되지 않음