

# Synergistic Removal of $\beta$ -Hexachlorocyclohexane from Water via Microorganism–Plant Technology and Analysis of Bacterial Community Characteristics

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The 16S rDNA sequence of Och1:

CAGAACGAACGCTGGCGGCAGGCTTAACACATGCAAGTCGAGCGCCCCGCAAG  
GGGAGCGGCAGACGGGTGAGTAACGCGTGGAACGTACCATTGCTACGGAATA  
ACTCAGGGAACTTGTGCTAATACCGTATGAGCCCCGAAAGGGGAAAGATTTATCG  
GCAAATGATCGGCCCCGCGTTGGATTAGCTAGTTGGTGGGGTAAAGGCCTACCAAG  
GCGACGATCCATAGCTGGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACA  
CGGCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGGACAATGGGCGCAA  
GCCTGATCCAGCCATGCCGCGTGAGTGATGAAGGCCCTAGGGTTGTAAAGCTCTT  
TCACCGGTGAAGATAATGACGGTAACCGGAGAAGAAGCCCCGGCTAACTTCGTG  
CCAGCAGCCGCGGTAATACGAAGGGGGCTAGCGTTGTTTCGGATTTACTGGGCGTA  
AAGCGCACGTAGGCGGGCTAATAAGTCAGGGGTGAAATCCCGGGGCTCAACCCC  
GGAAGTGCCTTTGATACTGTTAGTCTTGAGTATGGTAGAGGTGAGTGGAATTCGA  
GTGTAGAGGTGAAATTCGTAGATATTCGGAGGAACACCAGTGGCGAAGGCGGCT  
CACTGGACCATTACTGACGCTGAGGTGCGAAAGCGTGGGGAGCAAACAGGATTA  
GATACCCTGGTAGTCCACGCCGTAAACGATGAATGTTAGCCGTTGGGGAGTTTACT  
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ATTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCGGTGGAGCATGTGGTT  
TAATTCGAAGCAACGCGCAGAACCTTACCAGCCCTTGACATCCCGATCGCGGTTA  
GTGGAGACACTATCCTTCAGTTCGGCTGGATCGGAGACAGGTGCTGCATGGCTGT  
CGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTCG  
CCCTTAGTTGCCAGCATTGAGTTGGGCACTCTAAGGGGACTGCCGGTGATAAGCC  
GAGAGGAAGGTGGGGATGACGTCAAGTCCTCATGGCCCTTACGGGCTGGGCTAC  
ACACGTGCTACAATGGTGGTGACAGTGGGCGGCGAGCACGCGAGTGTGAGCTAA  
TCTCCAAAAGCCATCTCAGTTCGGATTGCACTCTGCAACTCGAGTGCATGAAGTT  
GGAATCGCTAGTAATCGCGGATCAGCATGCCGCGGTGAATACGTTCCCGGGCCTT

GTACACACCGCCCGTCACACCATGGGAGTTGGTTTTACCCGAAGGCGCTGTGCTA  
ACCGCAAGGAGGCAGGCGACCACGGTAGGGTCAGCGACTGGGGTGAA

The 16S rDNA sequence of Och2:

GAACGAACGCTGGCGGCAGGCTTAACACATGCAAGTCGAGCGCCCCGCAAGGG  
GAGCGGCAGACGGGTGAGTAACGCGTGGGAACGTACCATTGCTACGGAATAAC  
TCAGGGAAACTTGTGCTAATACCGTATGAGCCCGAAAGGGGAAAGATTTATCGGC  
AAATGATCGGCCCCGCGTTGGATTAGCTAGTTGGTGGGGTAAAGGCCTACCAAGGC  
GACGATCCATAGCTGGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACG  
GCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGGACAATGGGCGCAAGC  
CTGATCCAGCCATGCCGCGTGAGTGATGAAGGCCCTAGGGTTGTAAAGCTCTTTC  
ACCGGTGAAGATAATGACGTAACCGGAGAAGAAGCCCCGGCTAACTTCGTGCC  
AGCAGCCGCGGTAATACGAAGGGGGCTAGCGTTGTTCCGATTTACTGGGCGTAAA  
GCGCACGTAGGCGGGCTAATAAGTCAGGGGTGAAATCCCCGGGGCTCAACCCCGG  
AACTGCCTTTGATACTGTTAGTCTTGAGTATGGTAGAGGTGAGTGGAATTCCGAGT  
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CTGGACCATTACTGACGCTGAGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGA  
TACCCTGGTAGTCCACGCCGTAAACGATGAATGTTAGCCGTTGGGGAGTTTACTCT  
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TAAAACTCAAAGGAATTGACGGGGGGCCCGCACAAAGCGGTGGAGCATGTGGTTTA  
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The 16S rDNA sequence of Pse1:

CAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGATGAGGAGA  
GCTTGCTCTCTGATTCAGCGGCGGACGGGTGAGTAATGCCTAGGAATCTGCCTGG  
TAGTGGGGGACAACGTTTCGAAAGGAACGCTAATACCGCATACTCCTACGGGA  
GAAAGTGGGGGATCTTCGGACCTCACGCTATCAGATGAGCCTAGGTTCGATTAGC  
TAGTTGGTGGGGTAACGGCTACCAAGGCGACGATCCGTAACTGGTCTGAGAGG  
ATGATCAGTCACACTGGAAGTGGAGACACGGTCCAGACTCCTACGGGAGGCAGCA  
GTGGGGAATATTGGACAATGGGCGAAAGCCTGATCCAGCCATGCCGCGTGTGTGA  
AGAAGGCCCTCGGGTCGTAAAGCACTTTAAGCTGGGAGGAAGGGTTGTAACCTA  
ATACGTTGCAGCTTTGACGTTACCAGCAGAATAAGCACCGGCTAACTCTGTGCCA  
GCAGCCGCGGTAATACAGAGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAA  
GCGCGCGTAGGTGGCTTGGTAAAGTTGAATGTGAAATCCCCGGGCTCAACCTGGGA

ACTGCATCCAAAACCTGCCTGGCTAGAGTACGGTAGAGGGTGGTGGAATTTCTGT  
 GTAGCGGTGAAATGCGTAGATATAGGAAGGAACACCAGTGGCGAAGGCGACCAC  
 CTGGACTGATACTGACACTGAGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGA  
 TACCCTGGTAGTCCACGCCGTAAACGATGTCAACTAGCCGTTGGGGTCTTGAGA  
 CTTTAGTGGCGCAGCTAACGCAATAAGTTGACCGCCTGGGGAGTACGGCCGCAA  
 GGTAAAACCTCAAATGAATTGACGGGGGCCCCGCACAAGCGGTGGAGCATGTGGT  
 TTAATTCGAAGCAACGCGAAGAACCTTACCAGGCCTTGACATGCAGAGAACTTTC  
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 CAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGTAACGAGCGCAACCCTTGTC  
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 GAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGGCCTGGGCTACAC  
 ACGTGCTACAATGGTCGGTACAAAGGGTTGCCAAACCGCGAGGTGGAGCTAATC  
 CCATAAAACCGATCGTAGTCCGGATCGCAGTCTGCAACTCGACTGCGTGAAGTCG  
 GAATCGCTAGTAATCGTGAATCAGAACGTCACGGTGAATACGTTCCCGGGCCTTG  
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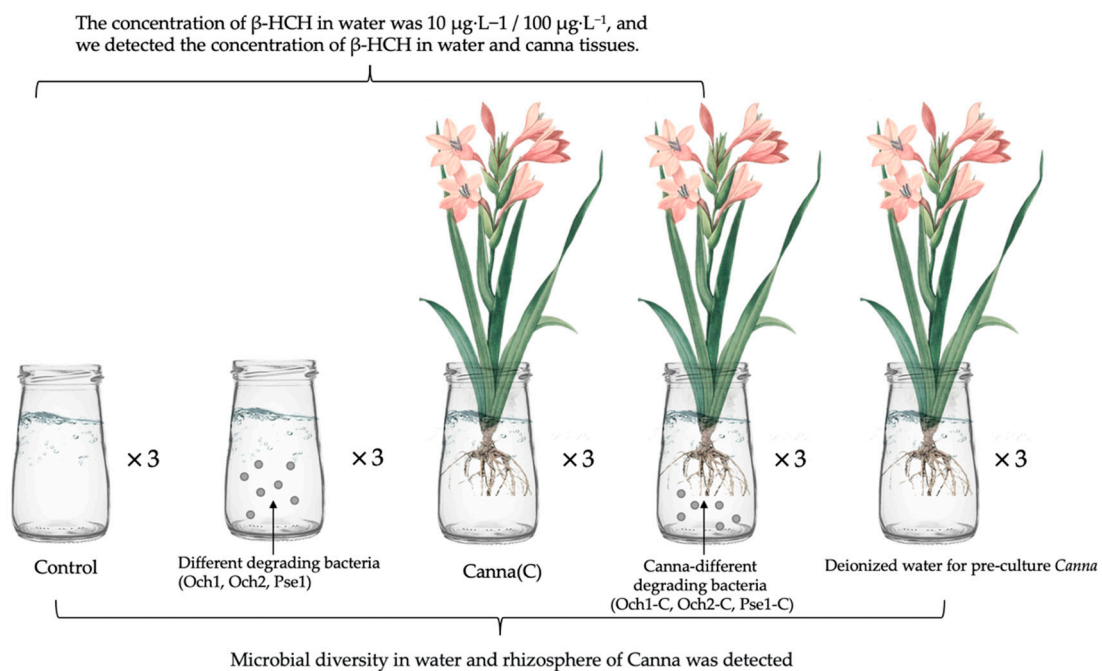


Figure S1. Experimental process diagram

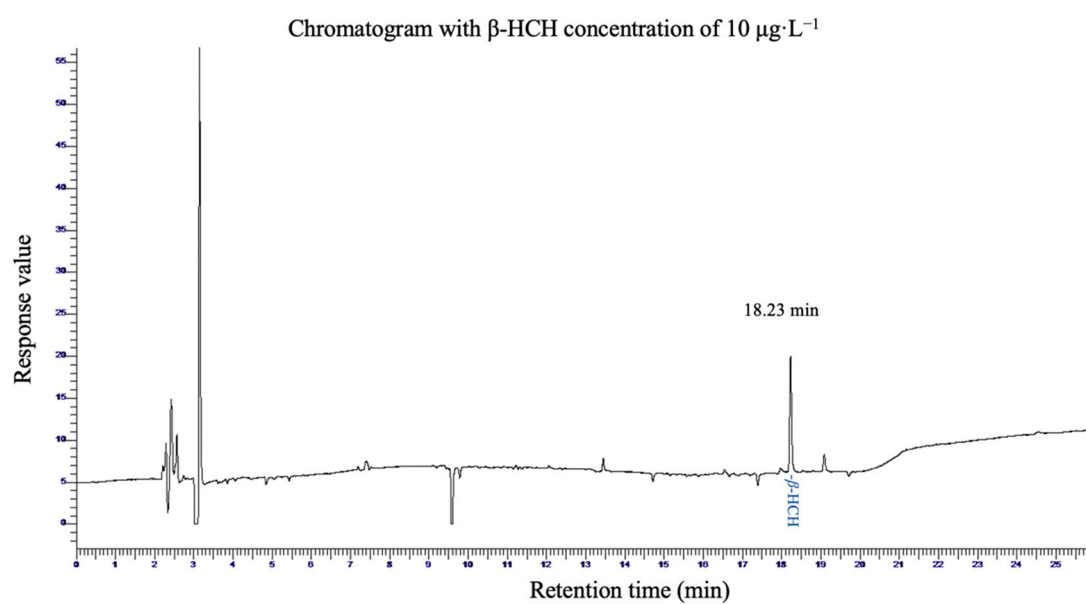
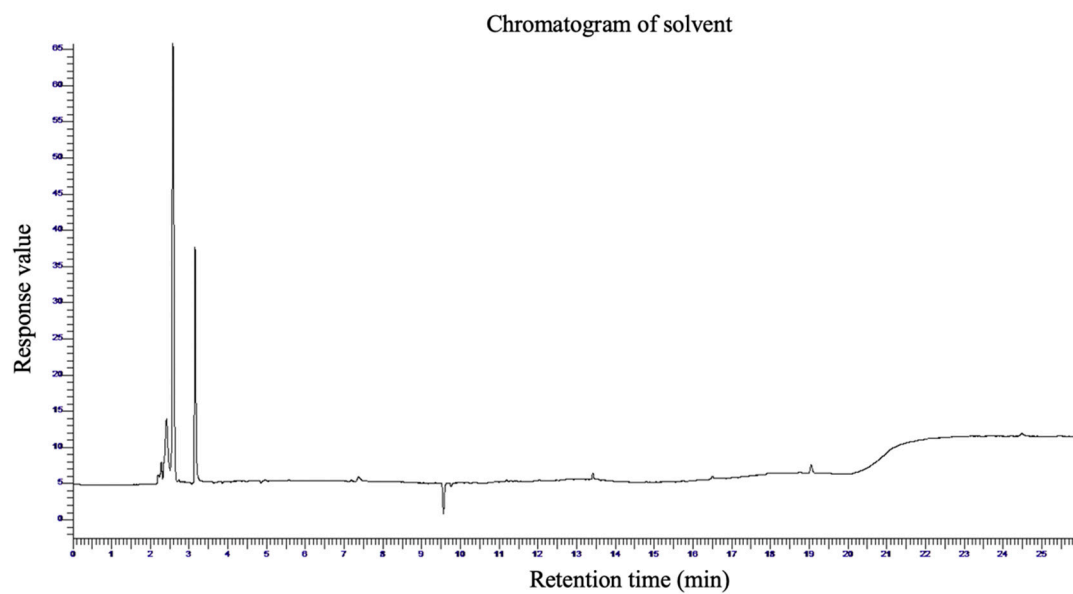


Figure S2. Chromatogram of  $\beta$ -HCH detection

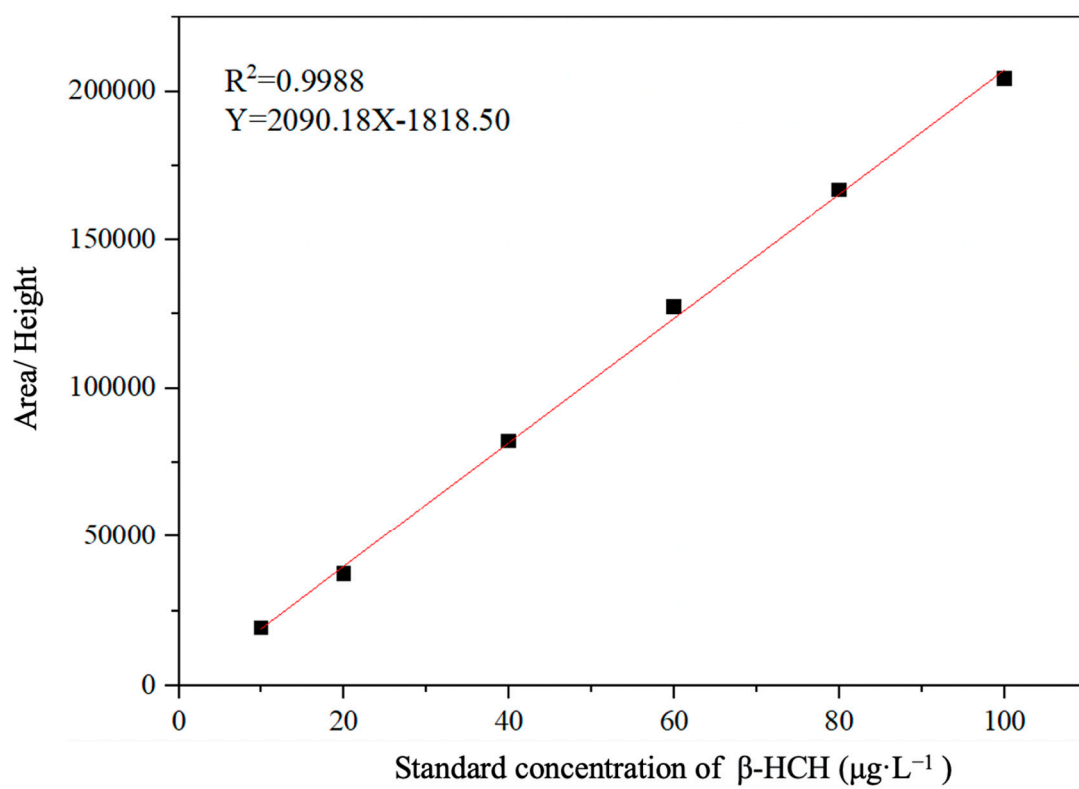


Figure S3. Standard curve of  $\beta$ -HCH