

ABSTRACT AND SOUVENIR  
LOUIS PASTEUR'S CENTENARY MEMORIAL SYMPOSIUM

A black and white portrait of Louis Pasteur, showing his face from the chest up. He has a full, white beard and mustache, and is wearing a dark suit jacket over a white shirt with a high collar. The background is a dark, textured grey.

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**ACCLIMATIZATION OF MICROBIAL CONSORTIA TO HIGHER CONCENTRATIONS  
OF HEXACHLOROCYCLOHEXANE (HCH) ISOMERS**

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**ABSTRACT**

Microbial consortia developed by long term enrichment of soil and sewage samples were acclimatized to higher concentrations of alpha-, beta-, gamma- and delta- isomers of HCH. The alpha- and gamma- HCH degrading consortia, A-HCH-C and G-HCH-S utilised upto 100 ppm of the respective substrates as sole carbon source. The rate of degradation improved significantly after the acclimatization, the time taken to mineralise same amount of alpha- and gamma- isomers being brought down to 5 days from that of 15 days taken by the unacclimatized cultures. Similarly, the time taken for degradation of beta- and delta- isomers by the respective consortia was also reduced to 5 days from 14 days after acclimatization with release of increased amounts of Cl<sup>-</sup>. Eight different bacterial strains were isolated from the HCH consortium. These individual strains, however, could degrade only low concentrations of alpha- and gamma- HCH.