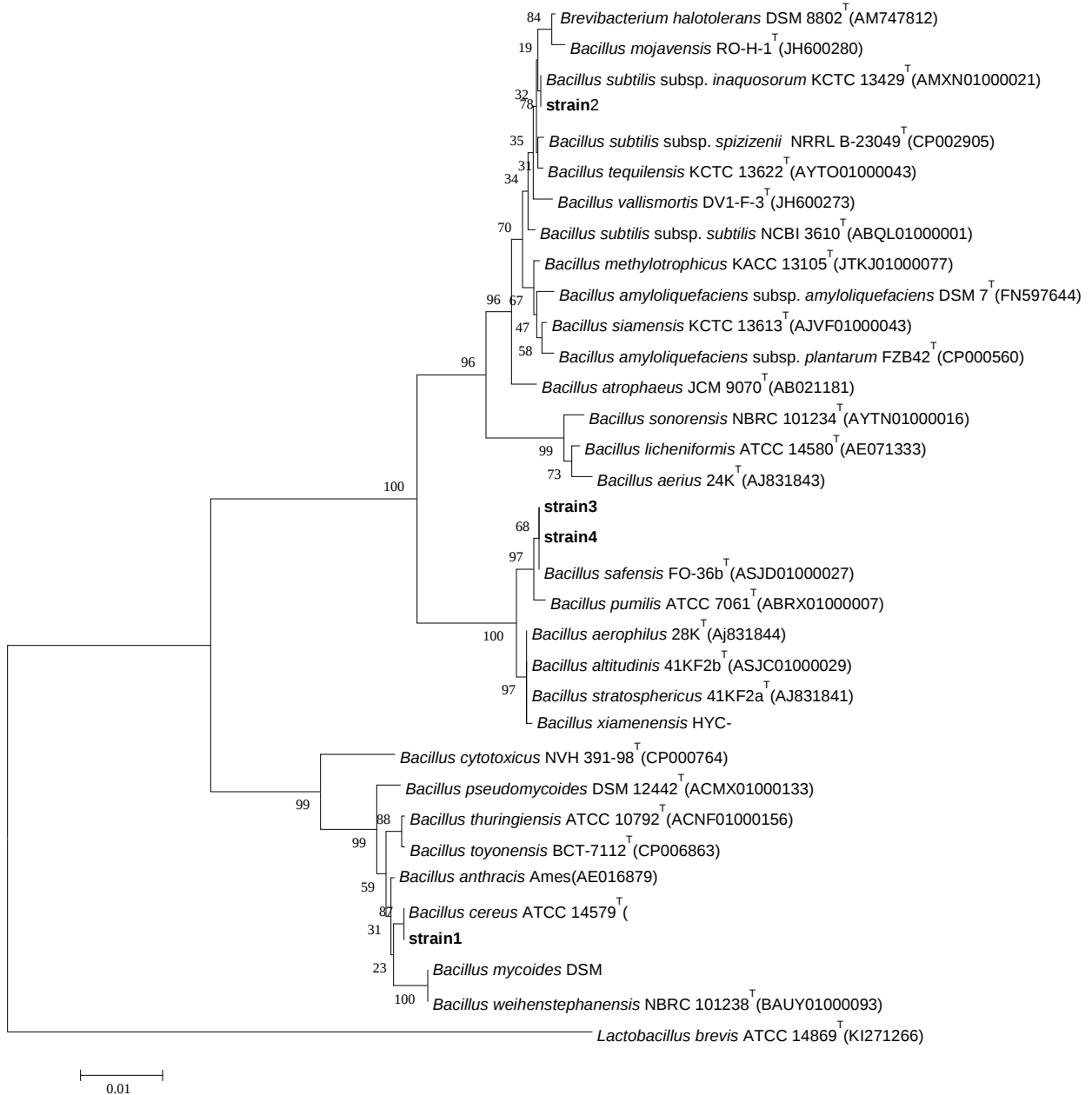


Supporting Information:

Figure 1: Phylogenetic relationships between the type strains of the type species of *Bacillus* and isolated strains based on the analysis of partial 16S rDNA sequences.



*Numbers above and below branch's indicate bootstrap values from Neighbor-Joining analysis.

Figure 2: Mass spectrum of chlorpyrifos

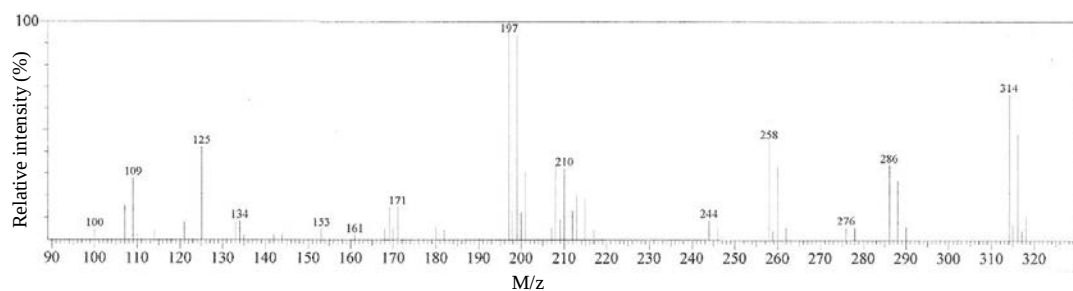


Figure 3: Mass spectrum of Hydroxy O-ethyl O-3,5,6-trichlorpyridin-2-yl phosphorothioate (chlorpyrifos metabolite)

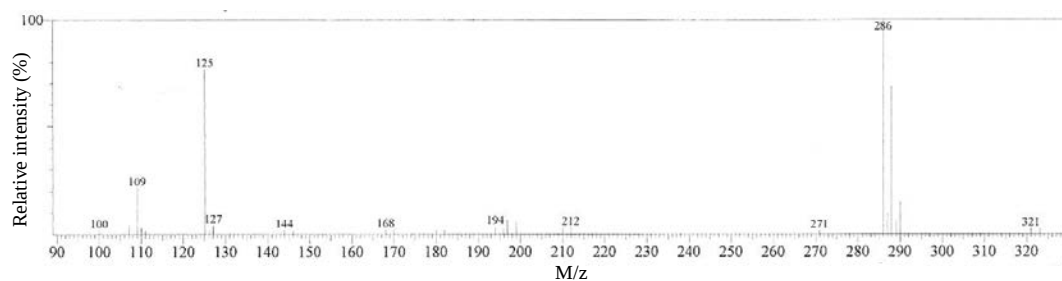


Figure 4: Mass spectrum of malathion

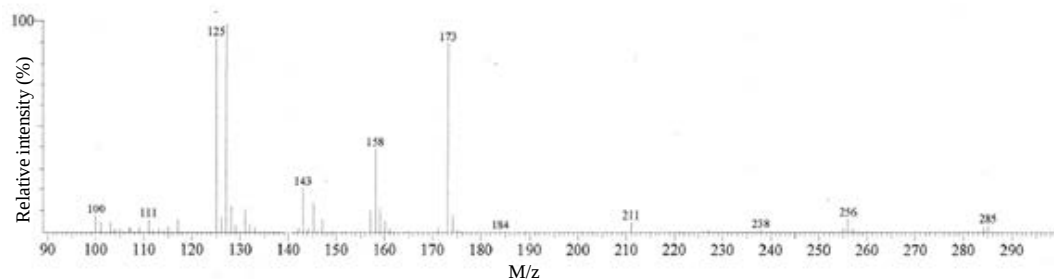


Figure 5: Mass spectrum of monoacid (malathion metabolite)

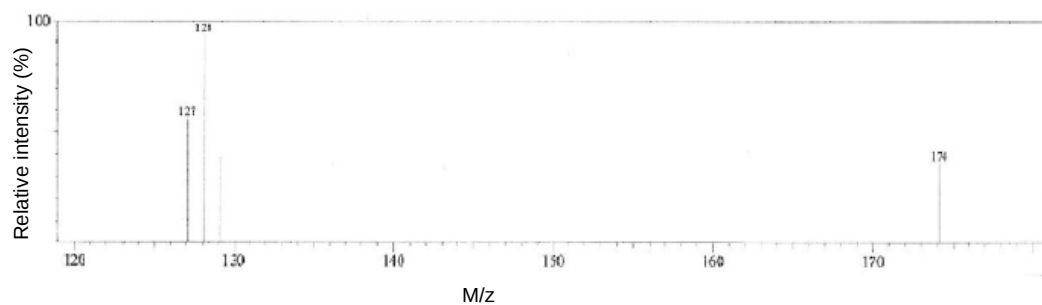


Figure 6: Mass spectrum of diacid (malathion metabolite)

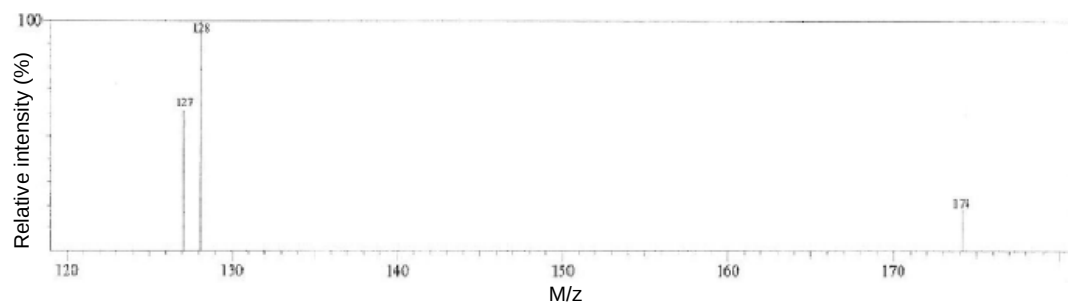


Figure 7: Mass spectrum of dimethoate

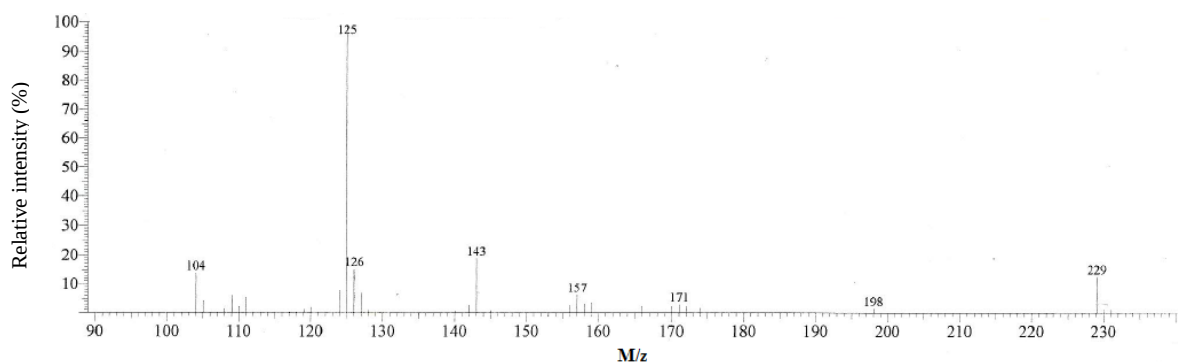


Figure 8: Mass spectrum of *O*-ethyl,*O*-hydroxyphosphorothioate (Dimethoate metabolite)

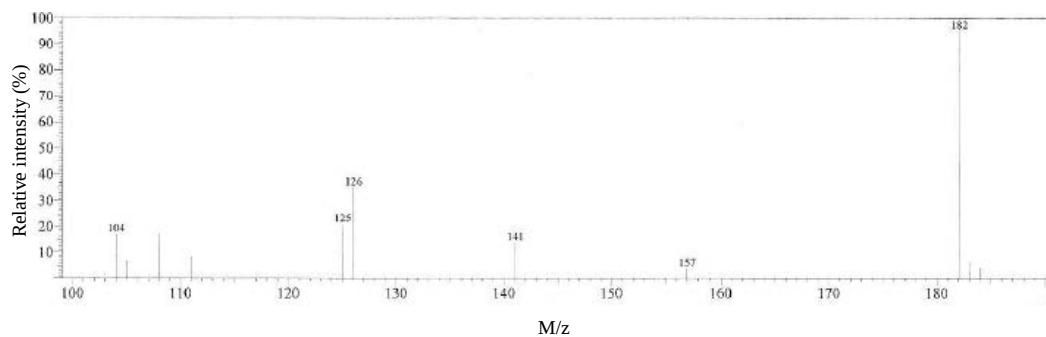


Figure 9: Mass spectrum of tetramethoxy pyrophosphate methylene dithioate (Dimethoate metabolite)

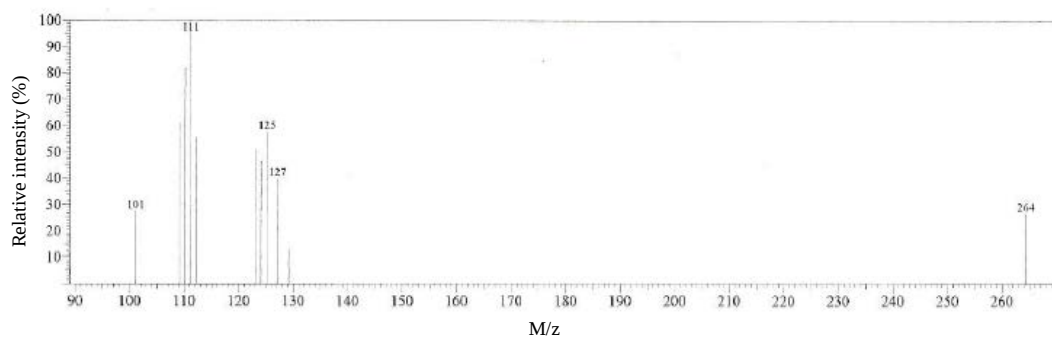


Figure 10: Proposed pathway of chlorpyrifos biodegradation by *B. safensis* strain FO-36b^T in a mineral salt medium (MSM)

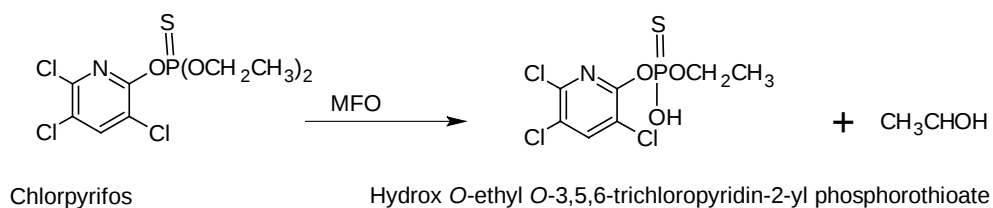


Figure 11: Proposed pathway of malathion biodegradation by *B. cereus* strain ATCC14579^T in a mineral salt medium (MSM)

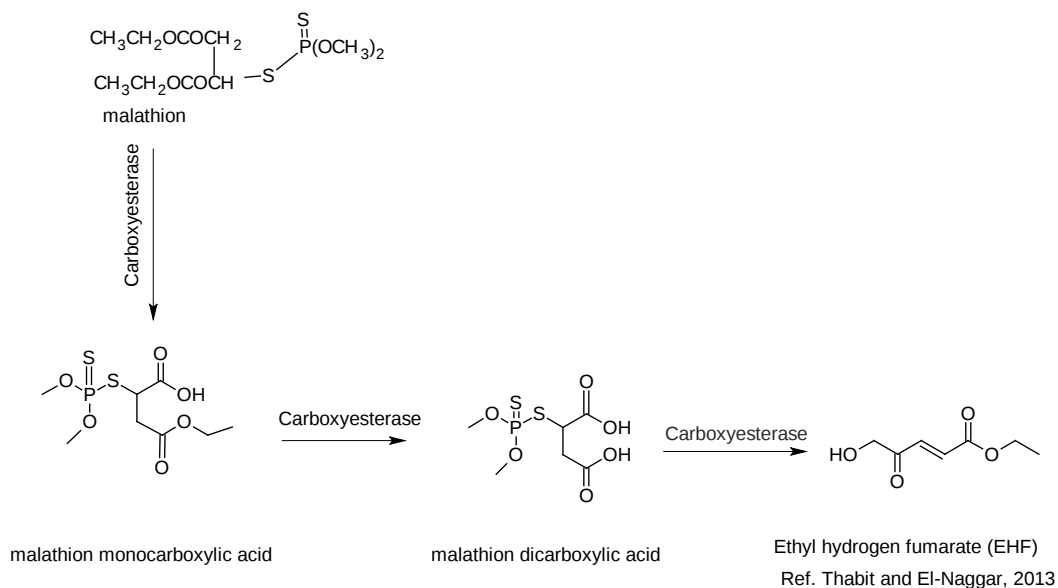


Figure 12: Proposed pathway of dimethoate biodegradation by *B. cereus* strain ATCC14579^T in a mineral salt medium (MSM)

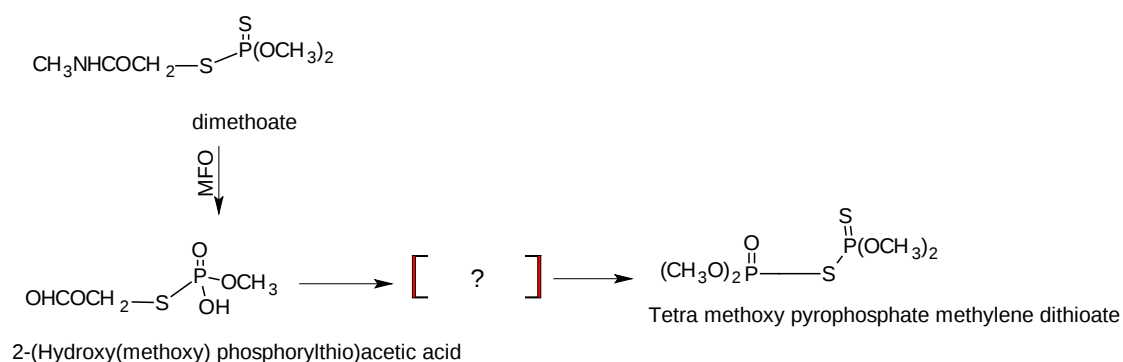


Figure 13: Typical chromatogram (Total Ion Current, TIC) of chlorpyrifos after 14 days of incubation with *B. safensis* strain FO-36b^T in a mineral salt medium (MSM)

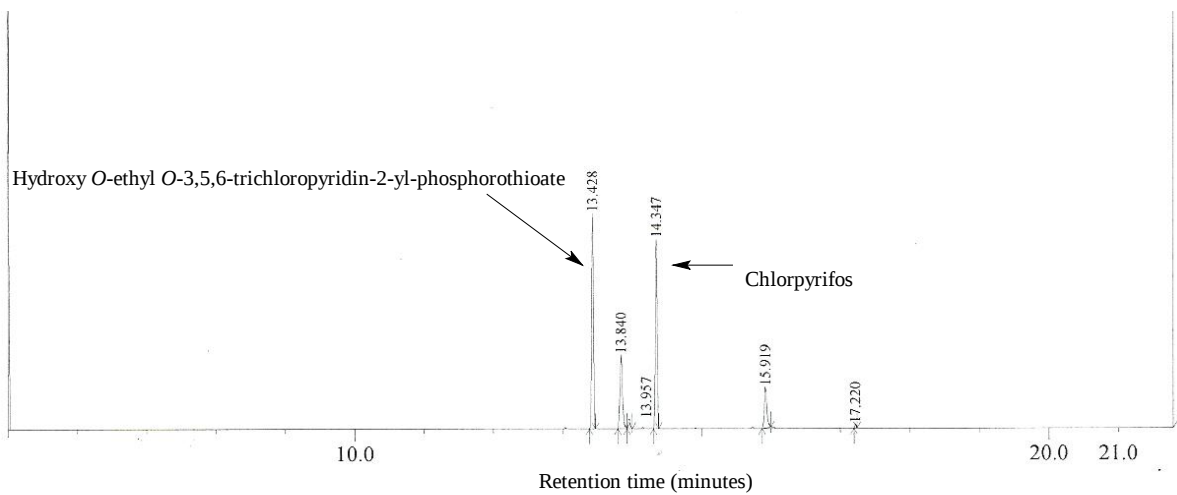


Figure 14: Typical chromatogram (TIC) of malathion after 14 days of incubation with *B. cereus* strain ATCC14579^T in a mineral salt medium (MSM)

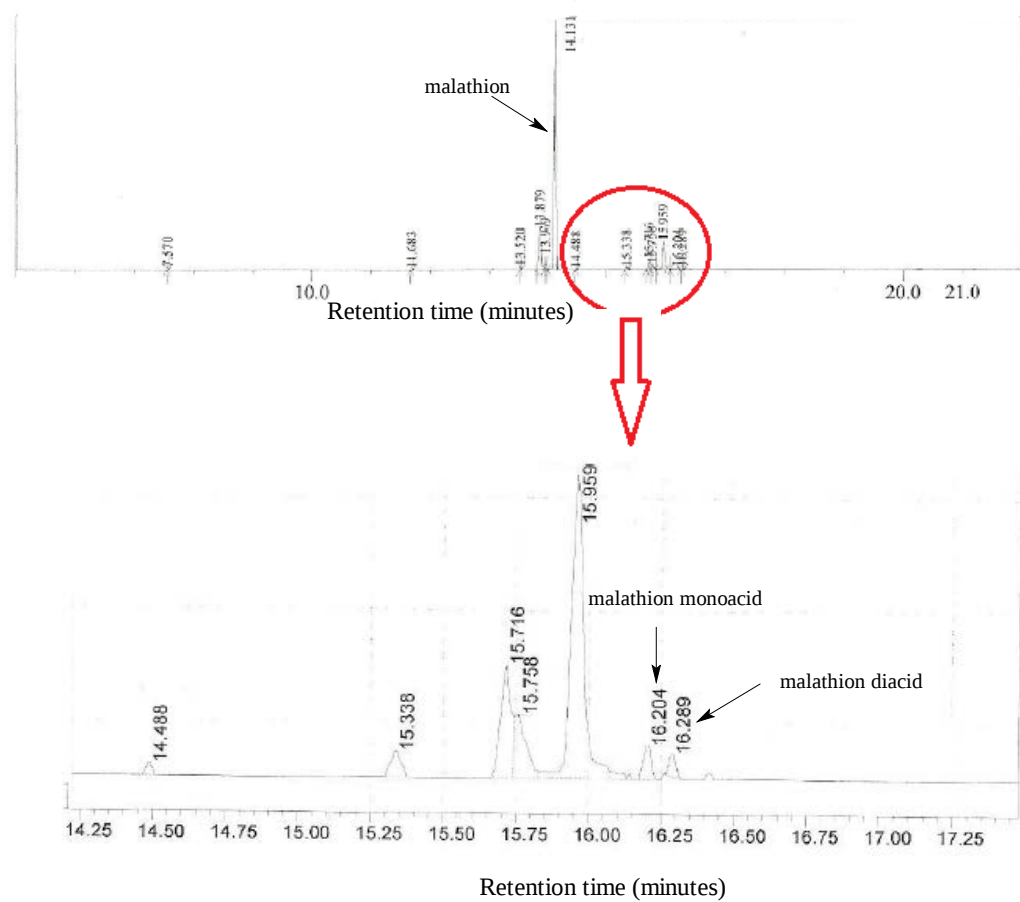
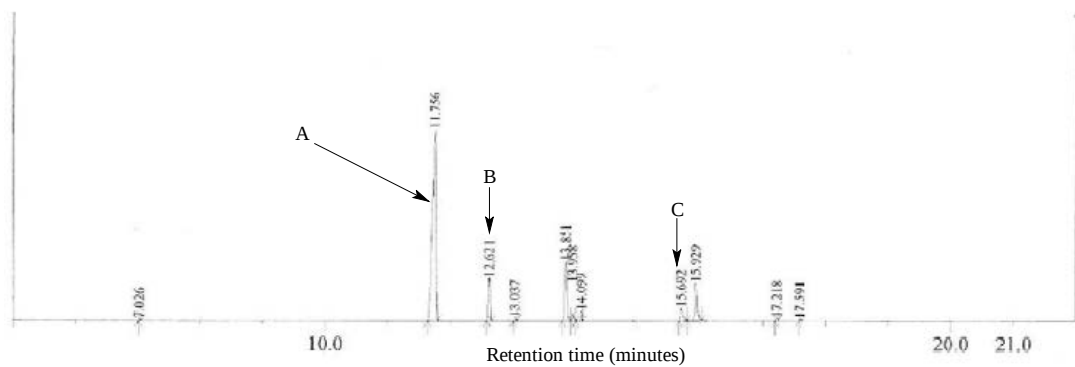


Figure 15: Typical chromatogram (TIC) of dimethoate after 14 days of incubation with *B. cereus* strain ATCC14579^T in mineral salt medium (MSM)



- A: Dimethoate
- B: *O*-ethyl, *O*-hydroxyphosphorothioate
- C: Tetramethoxy pyrophosphate dithioate