

LARGE SCALE PURIFICATION OF THE PYRUVATE DEHYDROGENASE COMPLEX OF A THERMOPHILIC *BACILLUS* SPECIES

K. Jeyaseelan

(Microbiology Unit, Department of Botany, University of Jaffna)

and

J. Visser

(Department of Biochemical Genetics, Agricultural University, Netherlands)

The pyruvate dehydrogenase complex of *Bacillus stearothermophilus* was purified by affinity chromatography on ethanol-Sepharose 2B followed by hydroxyapatite column chromatography. The overall purification was 230 fold based on the enzyme activity. The purified complex had a specific activity of 8.5 *micro* mol substrate transformed (ng protein)⁻¹ min⁻¹. The sodium dodecyl sulphate polyacrylamide gel electrophoresis of the purified complex showed the four polypeptide components of the complex with molecular weights (Mr), 58000 (E2 component) ; 53000 (E3 component) ; 40000 and 37000 (E1 α and E1 β sub units of the E1 component.)