The present study aimed to isolate and identify *Bacillus cereus* from local foods, in addition to studying the effect of some environmental factors and food preservatives (organic and inorganic) on the growth of this bacterium and its production of important enzymes. The results could be summarized as follows:

1. Forty five of ninety local food samples (cooked rice, raw milk and minced meat) were contaminated with *B. cereus*. Cooked rice samples were the most contaminated with this bacterium (70%), followed by raw milk (46.6%) and minced meat (33.3%). The local isolates did not show variation in their biological properties, with the exception of starch hydrolysis (amilase production) *B. thuringiensis* and *B. mycoides* which belonging to *B. cereus* group also occurred in these foods.

2. It was found that *B. cereus* grows in a wide range of temperatures (15-45°C) with optimum temperature of 30°C. It grows in a wide range of pH (4.5-9) with optimum pH of 7. The growth greatly decreased at temperatures below 20°C or over 40°C and pH below 5.

3. The optimum temperature for production of lecithinase and amylase was 30°C, while 35°C was optimum for the production of protease. Production of these enzymes was markedly decreased at lower temperatures, while they varied in their production at higher temperatures. Optimum pH for the production of lecithinase, protease and amylase were 6.5, 7 and 7.5 respectively. Protease and amylase produced better in alkaline pH than in acidic. Their production inhibited at pH 4.5, while lecithinase produced at this pH.

4. The lower concentration of lactic acid (0.02,0.03%) enhanced the growth of this bacterium. Acetic acid was more effective than lactic acid, where the growth of the local isolate completely inhibited by acetic acid at 0.08%.
while lactic acid at 0.1%. The lower concentration of sodium chloride (1.2%), enhanced the growth of this bacterium, while higher concentration (12%) completely inhibited its growth. Sodium nitrate did not cause completely inhibited the growth at any concentration used upto 500 PPM; the effect only limited to decrease the bacterial count.

5- It was found that 0.02% lactic acid enhanced the production of lecithin's but protease with 0.02, 0.03% concentrations, while 1% sodium chloride enhanced the production of protease. Production of enzymes (lecithin's, amylase and protease) was completely inhibited by acetic acid of (0.08, 0.06 and 0.06%) concentrations respectively, lactic acid with (0.09, 0.07 and 0.08%) respectively, and sodium chloride with (6, 8 and 8%), respectively. Sodium nitrite completely inhibited the production of lecithin's at 400 ppm, but did not cause complete inhibition for the production of protease and amylase. Its effect was limited only to the decrease their production.