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Fig 2a: Effects of pressures (100, 200, 300, 400, 500, and 550 MPa) on inactivation and germination of *B. cereus* 14579 spores at 40° C for 15 minutes.

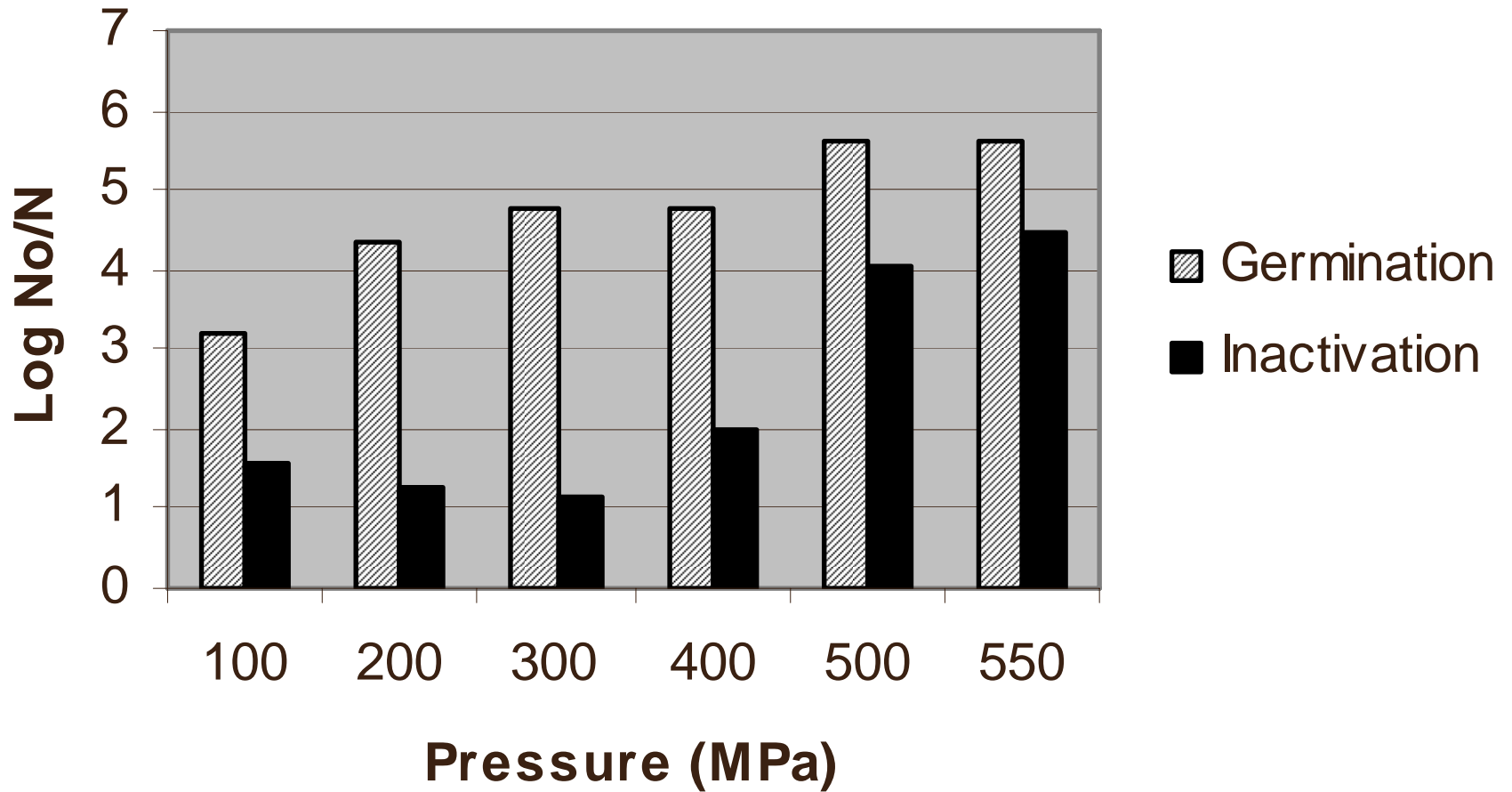


Fig 2b: Effects of pressures (100, 200, 300, 400, 500, and 550 MPa) on inactivation and germination of *B. cereus* 49064 spores at 40° C for 15 minutes.

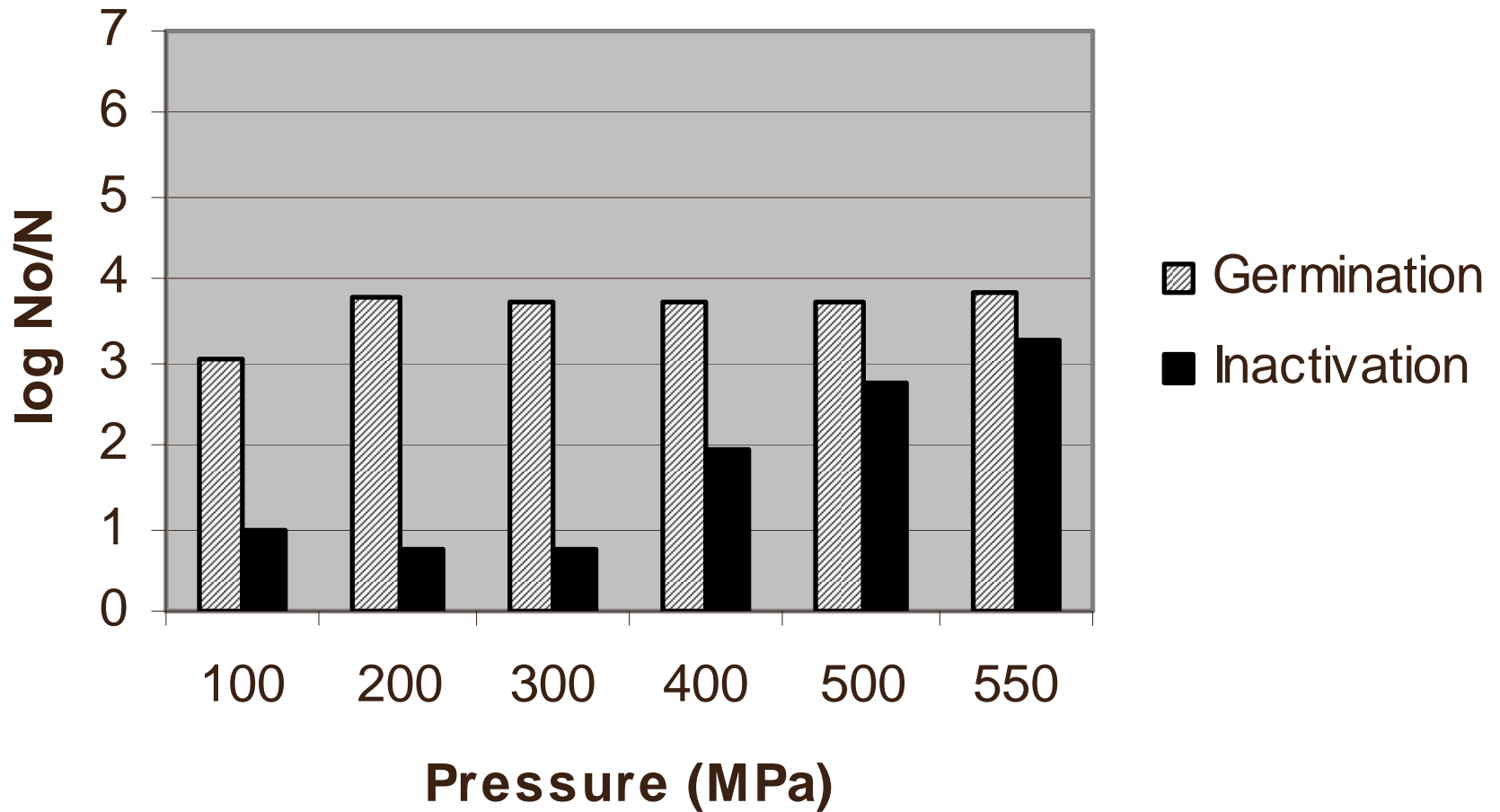


Fig 2c: Effects of pressures (100, 200, 300, 400, 500, and 550 MPa) on inactivation and germination of *B. cereus* spores isolated from crab at 40° C for 15 minutes.

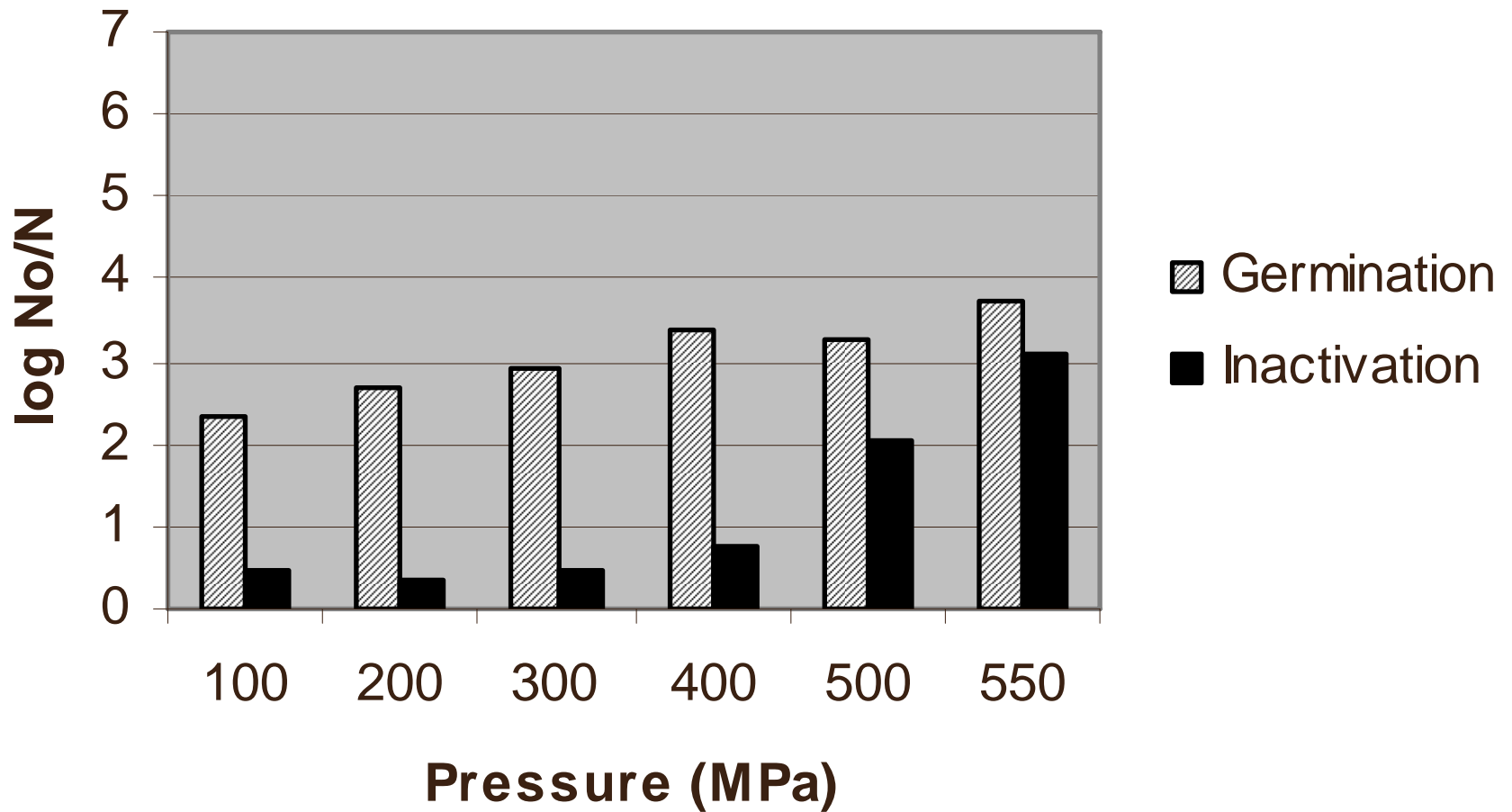


Fig 3a: Effect of pressures (100, 200, 300, 400, 500 and 550 MPa) at 40° C for 15 min on the release of DPA and on the survival of the *B. cereus* 14579 spores after heat treatment (80° C, 10 min).

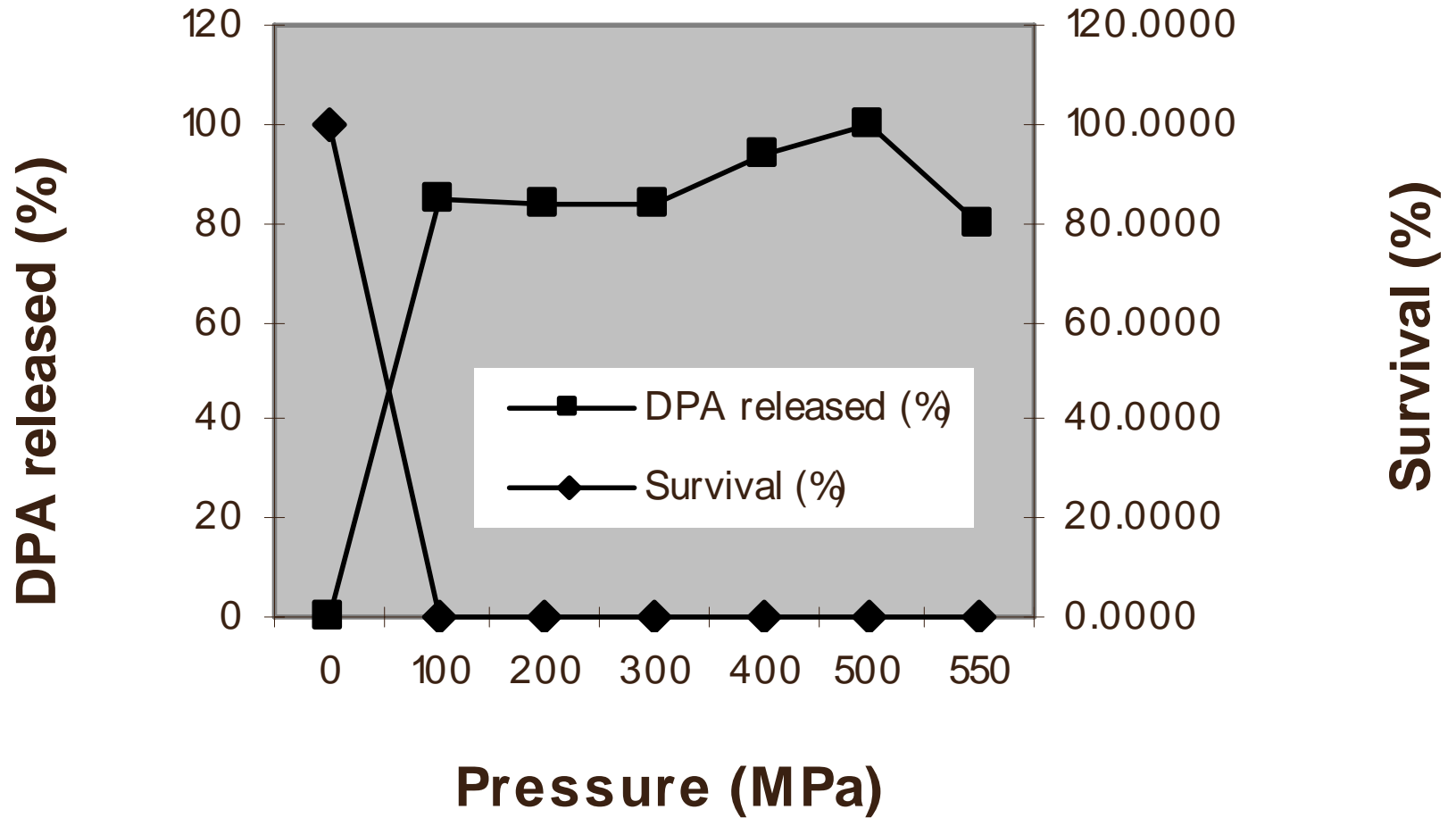


Fig 3b: Effect of pressures (100, 200, 300, 400, 500 and 550 MPa) at 40° C for 15 min on the release of DPA and on the survival of the *B. cereus* 49064 spores after heat treatment (80° C, 10 min).

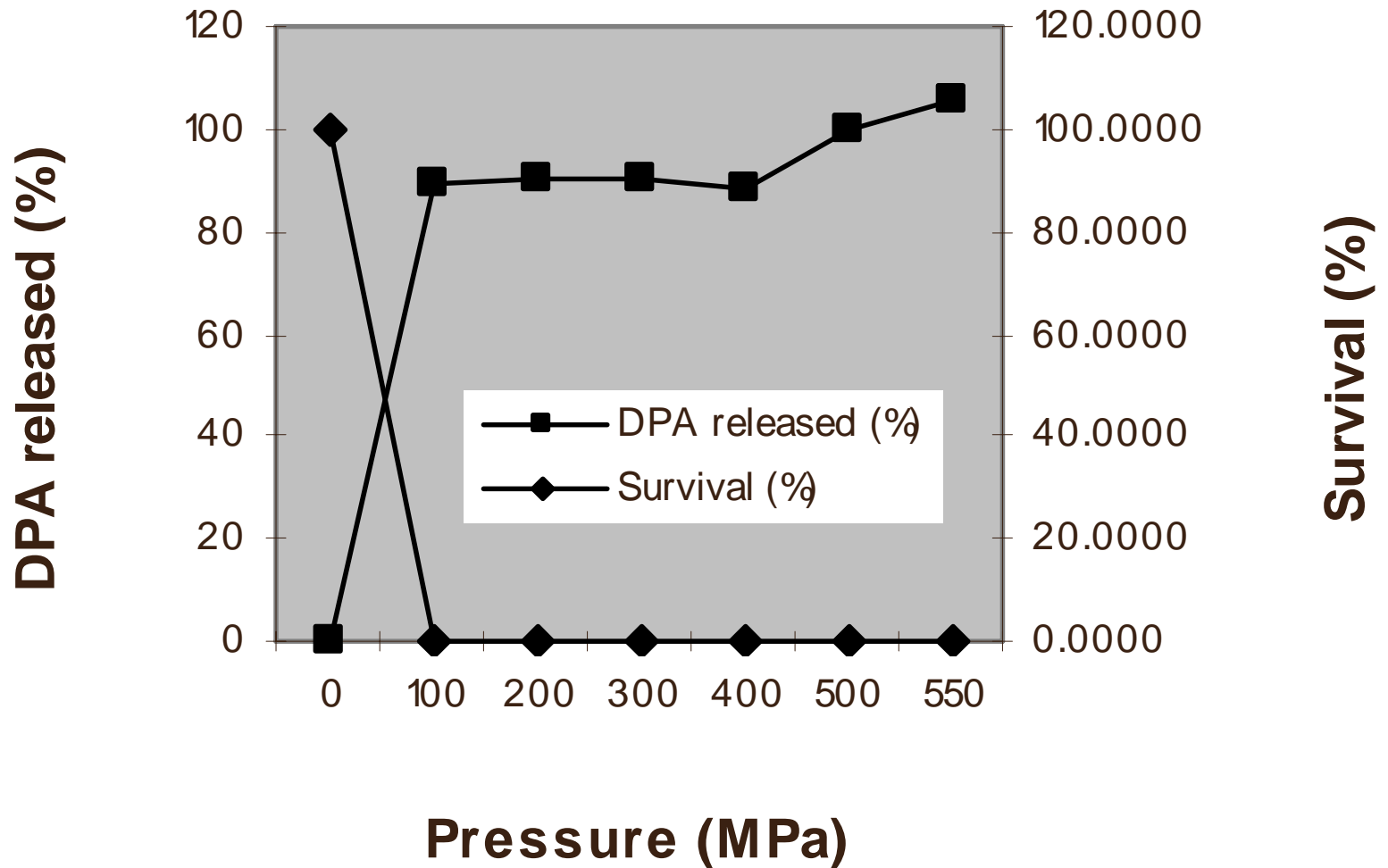


Fig 3c: Effect of pressures (100, 200, 300, 400, 500 and 550 MPa) at 40° C for 15 min on the release of DPA and on the survival of the *B. cereus* spores isolated from crab meat after heat treatment (80° C, 10 min).

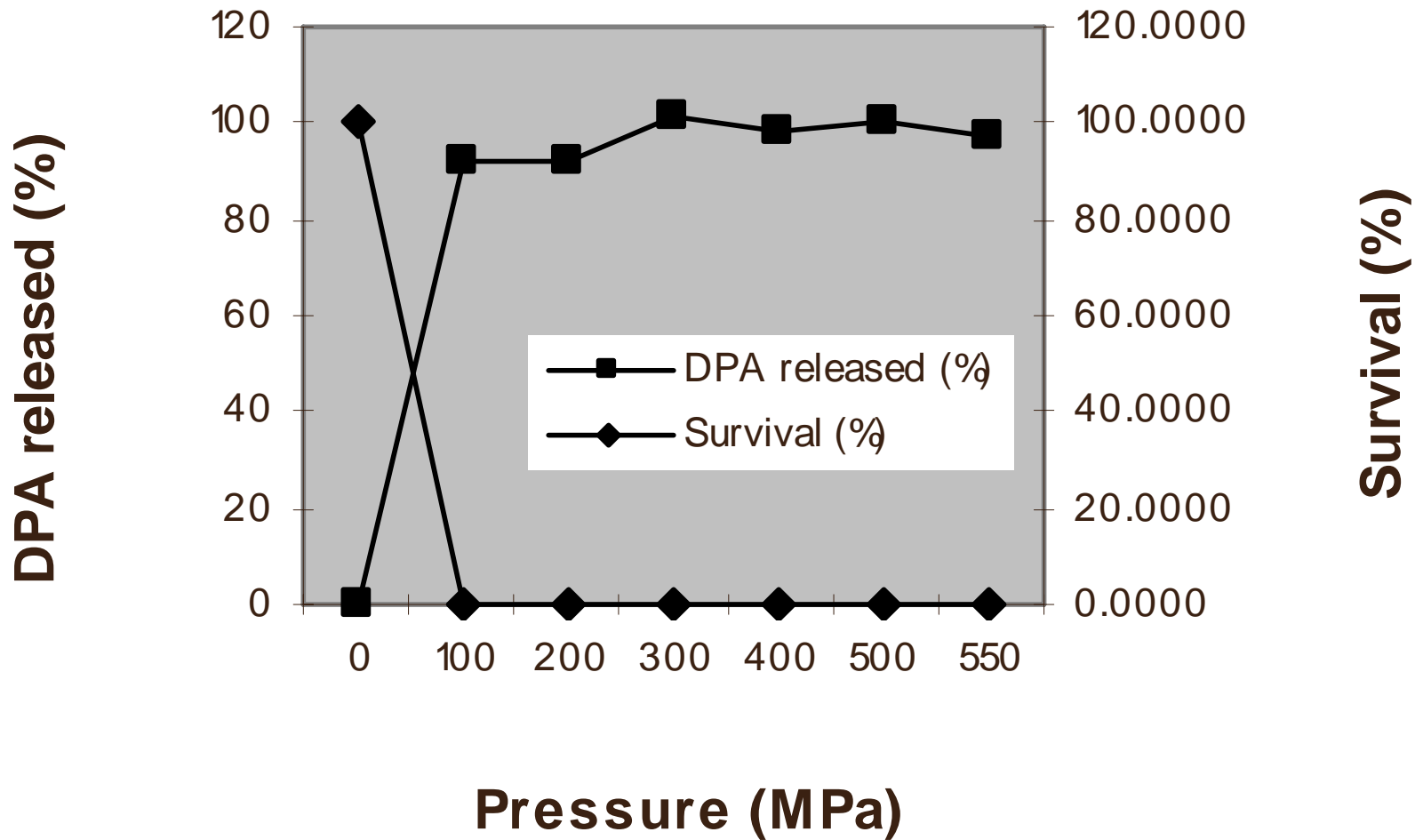


Fig 4: Effects of processing times (5, 10, and 15 min) on viable counts of *B. cereus* (a crab isolate) spores after a pressure treatment (550 MPa) and a pressure and a heat treatment (550 MPa and 80° C, 10 min)

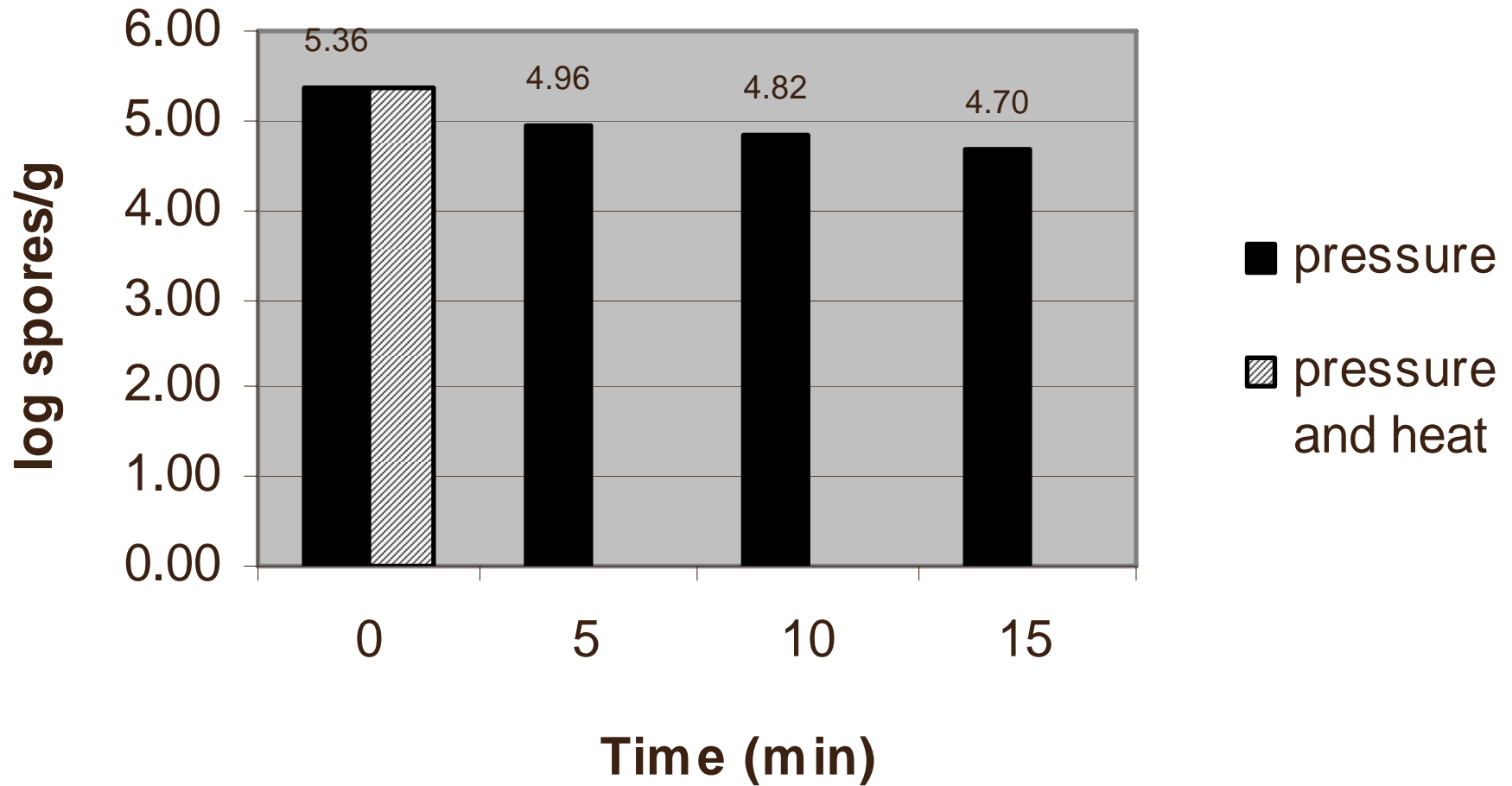


Fig 5: Growth of *B. cereus* in fresh crab meat after a pressure treatment (550 MPa, 40° C for 15 min) and during storage (0, 3, 7, 12, 17, 24, and 31) at 4 and 12° C

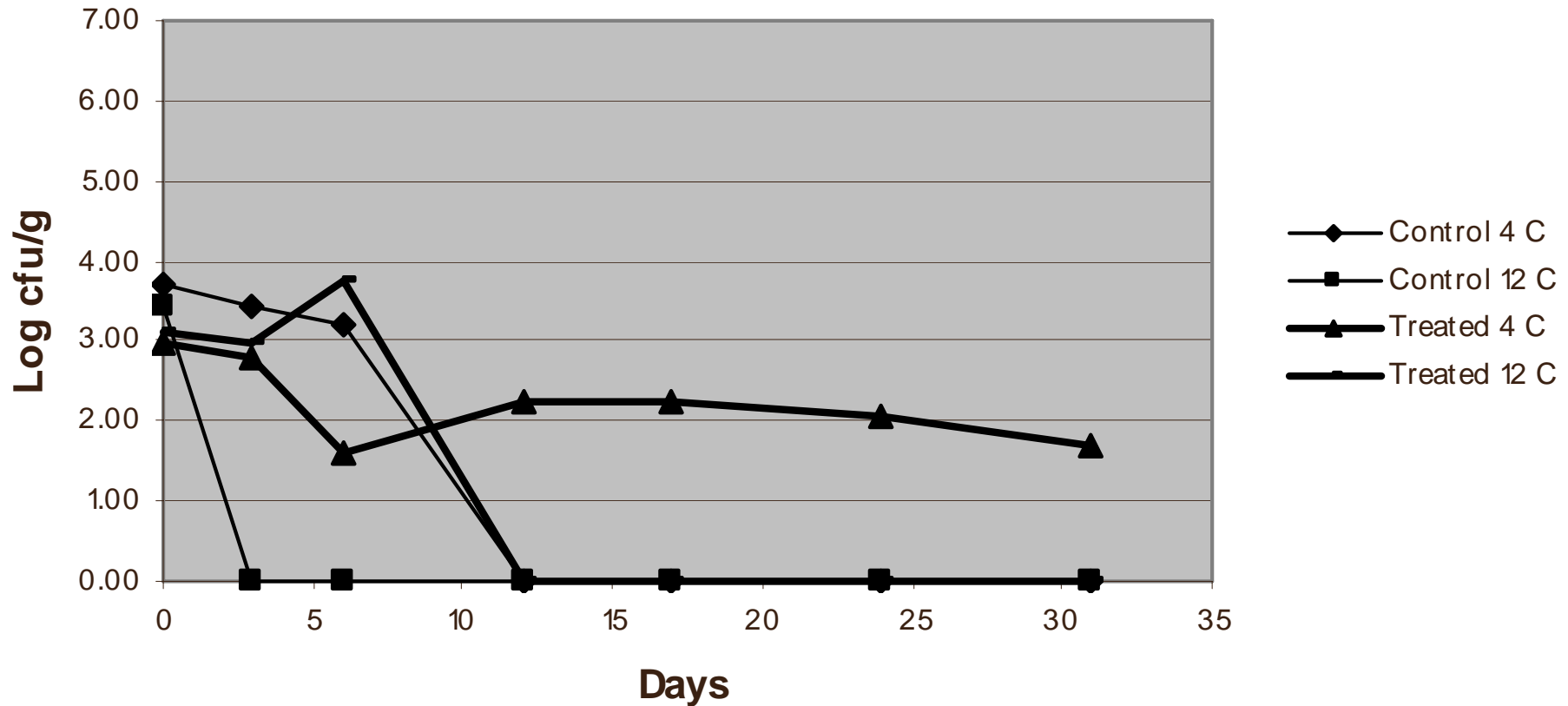


Table 1: Toxin production of unpressurized (control) and pressurized fresh crab meat (550 MPa, 15 min at 40° C) inoculated with *B. cereus* (103 spores/g) and stored at 4 and 12° C for 31 days

Treatment/Day	0	3	7	12	17	24	31
Positive control	+	+	+	+	+	+	+
Negative control	-	-	-	-	-	-	-
Control 4° C	-	-	-	-	-	-	-
Control 12° C	-	-	-	-	-	-	-
Treated 4° C	-	-	-	-	-	-	-
Treated 12° C	-	-	-	-	-	-	-

+ is positive for toxin detection

- is negative for toxin detection

Toxin detection was performed in triplicate with 3 samples under the same conditions.

Table 2a: Odor of unpressurized and pressure-treated crab meat (550 MPa for 15 min at 40° C) inoculated with *B. cereus* stored at the temperature of 4 and 12° C for 31 days

Day	Treatment / Storage temperature			
	Control 4° C ¹	Control 12° C ²	Treated 4° C ³	Treated 12° C ⁴
0	Fresh	Fresh	Fresh	Fresh
3	Fresh	Fresh	Fresh	Fresh
7	Crab smell, sweet, buttery, not putrid, at early stage of spoilage but still acceptable	Same type of smell as control 4° C but stronger	Stale, old, acceptable	Same type of smell as treated 4° C, acceptable

1 Control 4° C: Fresh crab meat inoculated with ~10³ cfu/g *B. cereus* and stored at 4° C for 31 days

2 Control 12° C: Fresh crab meat inoculated with ~10³ cfu/g *B. cereus* and stored at 12° C for 31 days

3 Treated 4° C: Fresh crab meat inoculated with ~10³ cfu/g *B. cereus* treated with 550 MPa at 40° C for 15 min and stored at 4° C for 31 days

4 Treated 12° C: Fresh crab meat inoculated with ~10³ cfu/g *B. cereus* treated with 550 MPa at 40° C for 15 min and stored at 12° C for 31 days

**** indicates spoilage evaluated by sensory panel members**

Table 2b: Odor of unpressurized and pressure-treated crab meat (550 MPa for 15 min at 40° C) inoculated with *B. cereus* stored at the temperature of 4 and 12° C for 31 days

Day	Treatment / Storage temperature			
	Control 4° C ¹	Control 12° C ²	Treated 4° C ³	Treated 12° C ⁴
12	Spoiled, rotten **	Spoiled, rotten **	Stale, old, acceptable	Stale, old, acceptable
17	Spoiled, rotten	Spoiled, rotten	Stale, old, not rotten, unacceptable **	Stale, old, unacceptable **
24	Spoiled, rotten	Spoiled, rotten	Strong stale, unacceptable	Strong stale, unacceptable
31	Spoiled, rotten	Spoiled, rotten	Spoiled	Spoiled

1 Control 4° C: Fresh crab meat inoculated with ~10³ cfu/g *B. cereus* and stored at 4° C for 31 days

2 Control 12° C: Fresh crab meat inoculated with ~10³ cfu/g *B. cereus* and stored at 12° C for 31 days

3 Treated 4° C: Fresh crab meat inoculated with ~10³ cfu/g *B. cereus* treated with 550 MPa at 40° C for 15 min and stored at 4° C for 31 days

4 Treated 12° C: Fresh crab meat inoculated with ~10³ cfu/g *B. cereus* treated with 550 MPa at 40° C for 15 min and stored at 12° C for 31 days

**** indicates spoilage evaluated by sensory panel members**

Fig 1a: Effects of processing times (5, 10, and 15 min) at 100, 300, and 550 MPa and 40° C on germination (a) and inactivation (b) of *B. cereus* spores 14579.

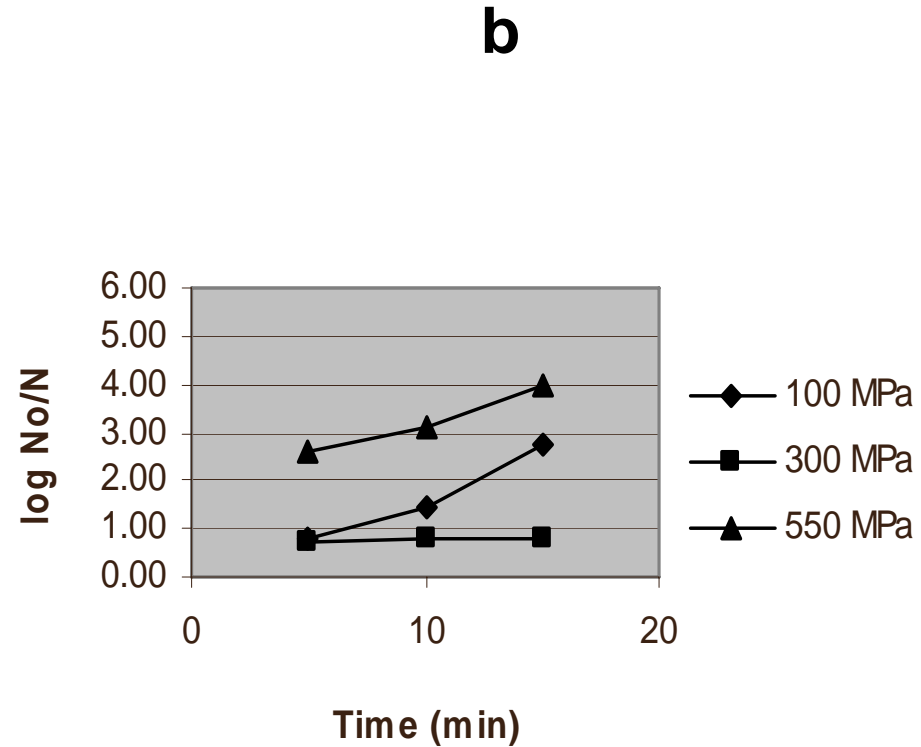
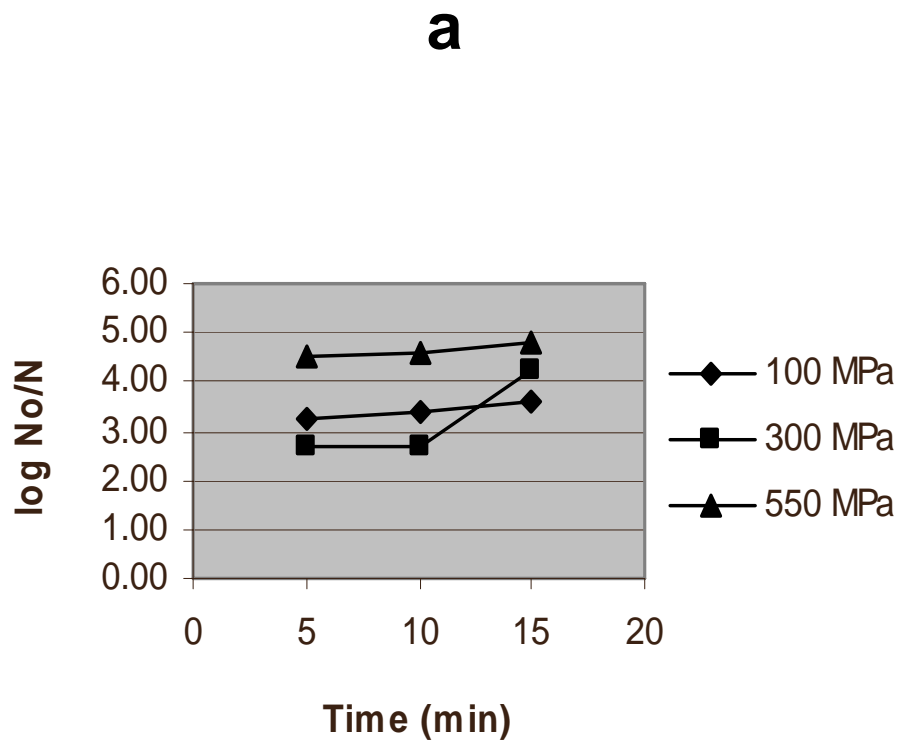


Fig 1b: Effects of processing times (5, 10, and 15 min) at 100, 300, and 550 MPa and 40° C on germination (a) and inactivation (b) of *B. cereus* spores 49064.

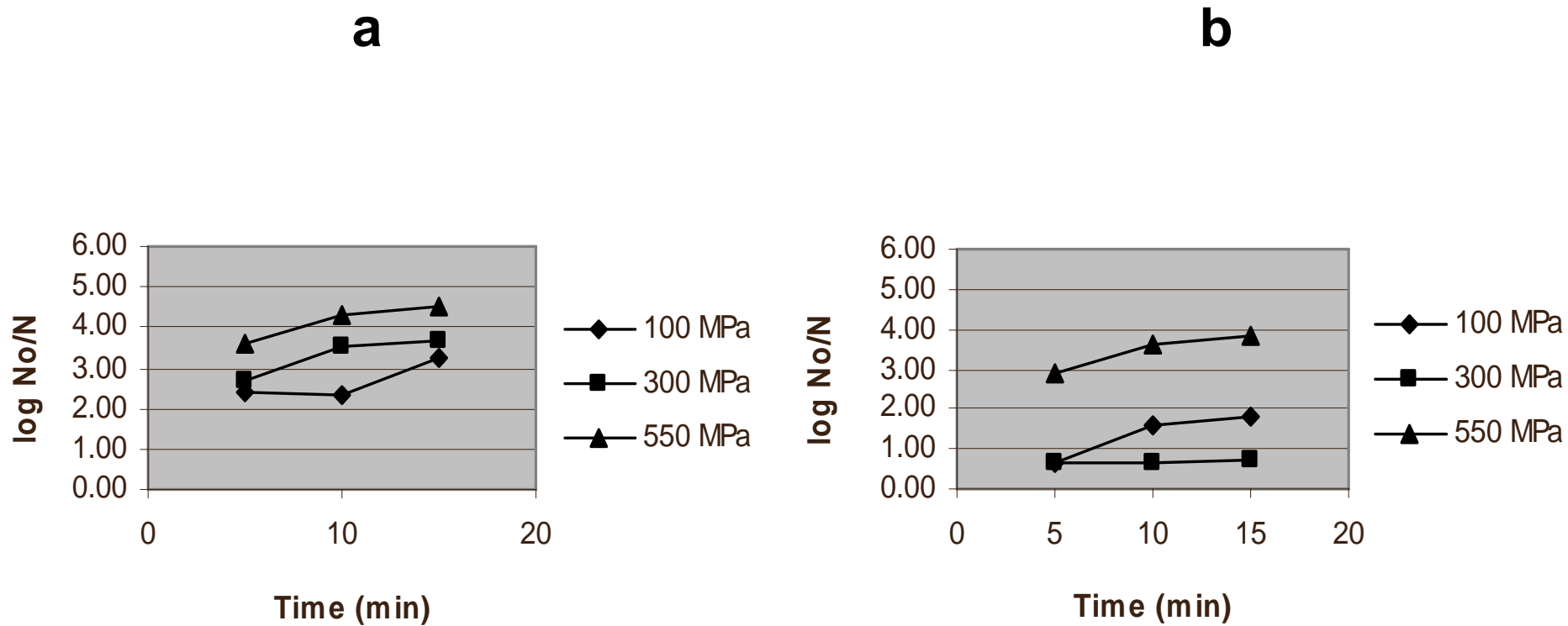


Fig 1c: Effects of processing times (5, 10, and 15 min) at 100, 300, and 550 MPa and 40° C on germination (a) and inactivation (b) of *B. cereus* spores isolated from crab meat.

