

The Test Culture of some Microorganisms with Whale Meat Peptone

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This experiment was carried out to determine the difference of value of utilization between the samples and market-peptones. Market peptones were used as follow ;

Teruuchi's, Witte's, Carneau's and Chaptoteaut's Peptone.

Experimental

Incubation-condition ;

Culture media ; Peptone-water prepared with the some kinds of peptones as above described.

Test-strains ; *B. coli communis*, *B. typhi*, *Pneumo coccus*, *B. dysenterie* Minoda, *V. cholerae*, *B. subtilie* M. B. 25, *Staph. coccus aureus* Terajima, *B. pyocyaneus*.

Incubation ; 37°C., 24 hrs.

Result ;

The amount of increased bacillus, the formation of dyestuff and H₂S are shown as follow :

B. Coli communis

Peptone	Hours				Order	Indol-formation			
	6	12	18	24		Ehrlich's Method		Kitazato's Method	
Sample	+	+	##	###	1	+	2	+	5
Teruuchi	##	##	##	###	2	##	1	##	3
Carneau	+	##	##	###	3	+	5	##	2
Witte	±	+	+	##	5	##	4	##	4
Chaptoteaut	+	##	##	##	4	##	3	##	1

B. typhi

Peptone	Hours				Order
	6	12	18	24	
Sample	+	##	###	###	2
Teruuchi	+	##	##	##	1
Carneau	+	##	##	##	4
Witte	+	+	+	##	5
Chaptoteaut	+	##	##	##	3

Pneumococcus 1

Peptone	Hours				Order
	6	12	18	24	
Sample	##	##	##	##	4
Teruuchi	##	##	##	##	1
Carneau	##	##	##	##	5
Witte	##	##	##	##	3
Chaptoteaut	+	##	##	##	2

B. dysenteriae Minoda						V. cholerae O.							
Hours	6	12	18	24	Order	Hours	6	12	18	24	Order	Indol-formation	Order
Peptone						Peptone							
Sample	+	+	+	+	4	Sample	+	+	+	+	1	+	5
Teruuchi	+	+	+	+	1	Teruuchi	+	+	+	+	4	+	4
Carneau	+	+	+	+	2	Carneau	+	+	+	+	3	+	5
Witte	±	+	+	+	5	Witte	+	+	+	+	5	+	2
Chaptoteaut	+	+	+	+	3	Chaptoteaut	±	+	+	+	2	+	1

The experiments above described led summarily to the results as follow :

Peptone	Order of Bac.-growth					Order of Indol-formation		
Sample	1	1	2	4	4	2	3	5
Teruuchi	1	1	1	2	4	1	3	4
Carneau	2	3	3	3	3	2	5	5
Witte	2	5	5	5	5	2	4	4
Chaptoteaut	2	2	3	3	4	1	1	3

(i) The amount of increased Bac. Incubation ; 24 hrs, Peptone-water, pH 7.0

Strain	B. subtilis M. B. :5 B. pyocyaneus				Staph. aureus Terajima	
	Order		Order		Order	
Peptone						
Teruuchi	##	1	##	1	##	1
Witte	+	4	+	2	##	1
Sample	##	2	##	1	##	1
Carneau	##	3	##	1	##	1
Chaptoteaut	##	3	##	1	##	1

(ii) B. typhi ; H₂S-Formation tested by Lead-acetate-paper. pH 6.8 (iii) Formation of dyestuff and Indol. B. Pyocyaneus. Incubation ; 36hrs, pH 7.0

Hours	24	36	Reaction		Indol-formation		Growth
			Peptone	Dyestuff	Ehrlich's Method	Kitazato's Method	
Peptone							
Teruuchi	##	##	Teruuchi	-	##	##	##
Witte	+	+	Witte	##	+	+	+
Sample	-	-	Sample	-	+	+	##
Carneau	+	##	Carneau	+	+	+	+
Chaptoteaut	-	-	Chaptoteaut	+	+	+	##

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