

## Lampiran I. Hasil analisis sidik ragam

### 1. Sidik ragam presentase gula reduksi hari pengamatan ke 10

Source	DF	Anova SS	Mean Square	F Value	Pr > F
T	1	1.89062500	1.89062500	0.47	0.5124 ns
S	3	2.51562500	0.83854167	0.21	0.8878 ns
T*S	3	2.51562500	0.83854167	0.21	0.8878 ns
Error	8	32.18750000	4.02343750		
Corrected Total	15	39.10937500			

Keterangan : \* ada beda nyata  
 ns tidak ada beda nyata  
 C.V. 7.908908

### 2. Sidik ragam vitamin C hari pengamatan ke 10

Source	DF	Anova SS	Mean Square	F Value	Pr > F
T	1	7.04902500	7.04902500	1.79	0.2173 ns
S	3	18.97835000	6.32611667	1.61	0.2623 ns
T*S	3	6.70332500	2.23444167	0.57	0.6512 ns
Error	8	31.44850000	3.93106250		
Corrected Total	15	64.17920000			

Keterangan : \* ada beda nyata  
 ns tidak ada beda nyata  
 C.V. 16.85961

### 3. Sidik ragam asam tertitiasi hari pengamatan ke 10

Source	DF	Anova SS	Mean Square	F Value	Pr > F
T	1	3.01890625	3.01890625	49.45 *	0.0001 *
S	3	0.67596875	0.22532292	3.69 ns	0.0620 ns
T*S	3	0.54361875	0.18120625	2.97 ns	0.0971 ns
Error	8	0.48835000	0.06104375		
Corrected Total	15	4.72684375			

Keterangan : \* ada beda nyata  
 ns tidak ada beda nyata  
 C.V. 20.49000

#### 4. Sidik ragam kadar air hari pengamatan ke 10

Source	DF	Anova SS	Mean Square	F Value	Pr > F
T	1	1.89062500	1.89062500	0.47	0.5124 ns
S	3	2.51562500	0.83854167	0.21	0.8878 ns
T*S	3	2.51562500	0.83854167	0.21	0.8878 ns
Error	8	32.18750000	4.02343750		
Corrected Total	15	39.10937500			

Keterangan : \* ada beda nyata  
 ns tidak ada beda nyata  
 C.V. 2.268902

#### 5. Sidik ragam susut berat hari pengamatan ke 10

Source	DF	Anova SS	Mean Square	F Value	Pr > F
T	1	5.39400625	5.39400625	42.89	0.0002 *
S	3	0.36096875	0.12032292	0.96	0.4584 ns
T*S	3	0.11116875	0.03705625	0.29	0.8284 ns
Error	8	1.00605000	0.12575625		
Corrected Total	15	6.87219375			

Keterangan : \* ada beda nyata  
 ns tidak ada beda nyata  
 C.V. 26.15925

#### 6. Sidik ragam kekerasan hari pengamatan ke 10

Source	DF	Anova SS	Mean Square	F Value	Pr > F
T	1	3.83180625	3.83180625	10.09	0.0131 *
S	3	5.53161875	1.84387292	4.86	0.0329 ns
T*S	3	1.75356875	0.58452292	1.54	0.2777 ns
Error	8	3.03805000	0.37975625		
Corrected Total	15	14.15504375			

Keterangan : \* ada beda nyata  
 ns tidak ada beda nyata  
 C.V. 7.848363

**Lampiran 2. Komposisi media Natrium Agar (NA) dan**

Ekstrak daging	3 gram
Pepton	5 gram
Aquadest	100 ml
Agar	15 gram
pH	7,2

**Lampiran 3. Lay out penelitian**

**Lay out luar**

T.1.S.1 (1)	T.1.S.2 (2)
T.1.S.3 (2)	T.1.S.0 (2)
T.1.S.2 (1)	T.1.S.3 (1)
T.1.S.1 (2)	T.1.S.0 (1)

**Lay out refrigerator**

T.2.S.0 (1)	T.2.S.2 (2)
T.2.S.3 (2)	T.2.S.1 (2)
T.2.S.0 (2)	T.2.S.1 (1)
T.2.S.2 (1)	T.2.S.3 (1)

**Keterangan :**

T.1 : suhu ruang

S.1 : Tanpa semen

T.2 : suhu 0°C

S.1 : Semen 10 gram

S.2 : Semen 20 gram

S.3 : semen 30 gram

**Lay out perlakuan**

K	K	C
S	S	C

**Keterangan :**

K : kubis korban

S : kubis sampel

C : cadangan

#### Lampiran 4. Siklus vitamin C

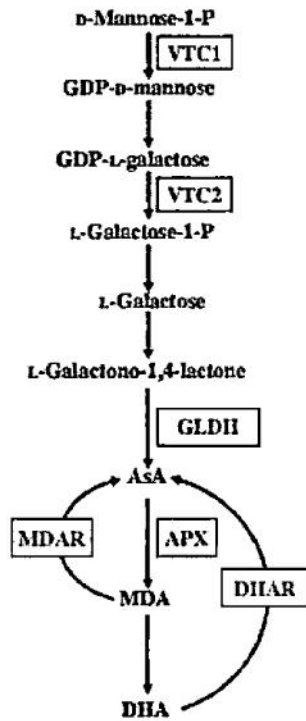


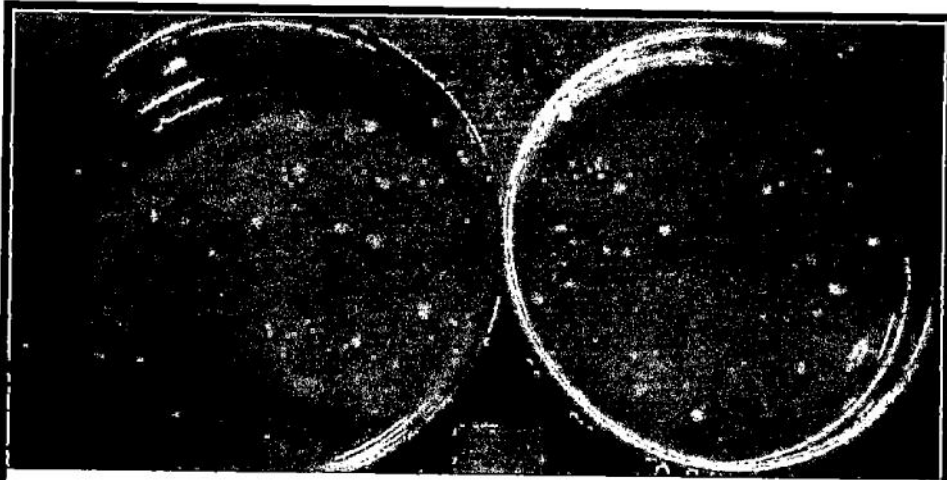
Fig. 1. The main pathway of ascorbate metabolism in plants. VTC1, GDP-D-mannose pyrophosphorylase; VTC2, GDP-L-galactose phosphorylase; GLDH, L-galactono-1,4-lactone dehydrogenase; AsA, ascorbate; APX, ascorbate peroxidase; MDA, monodehydroascorbate; MDAR, monodehydroascorbate reductase; DHA, dehydroascorbate; DHAR, dehydroascorbate reductase.

Lampiran 5. Foto perkembangan mikrobial pada pengamatan hari ke 10 ( $10^{-5}$ )

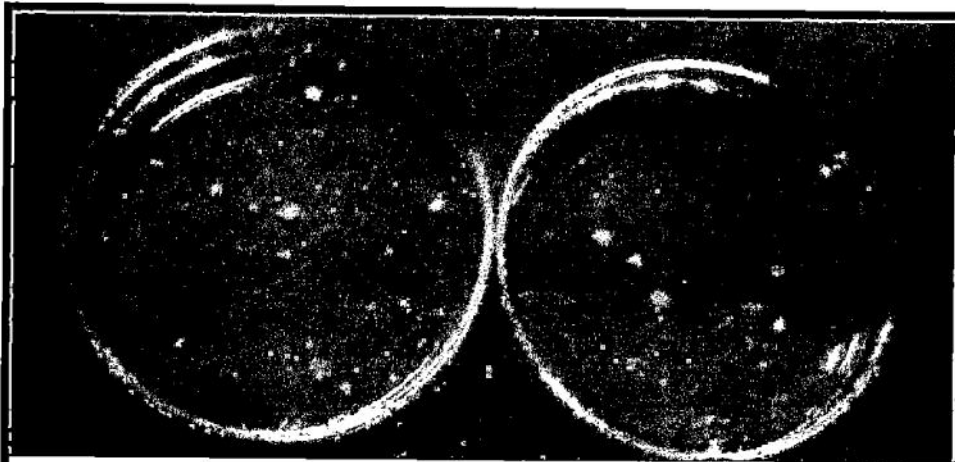




Suhu 0°C

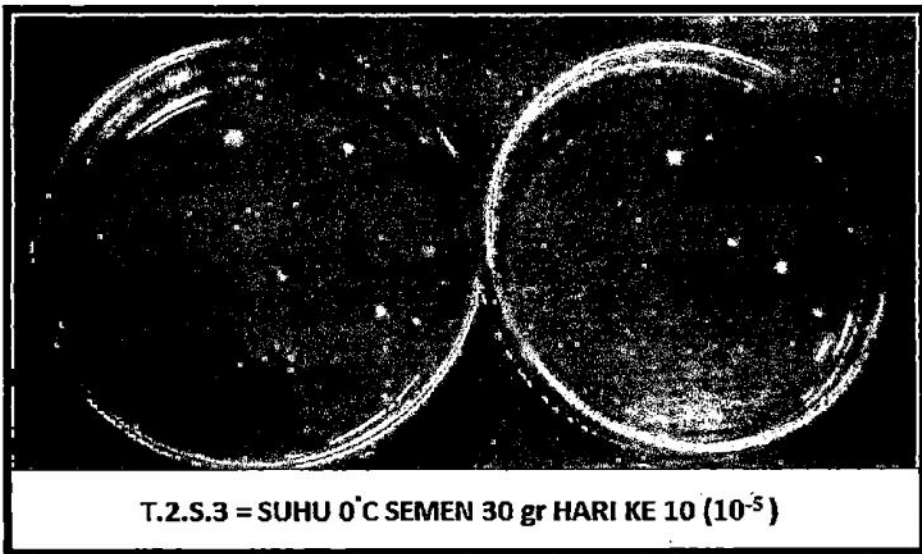
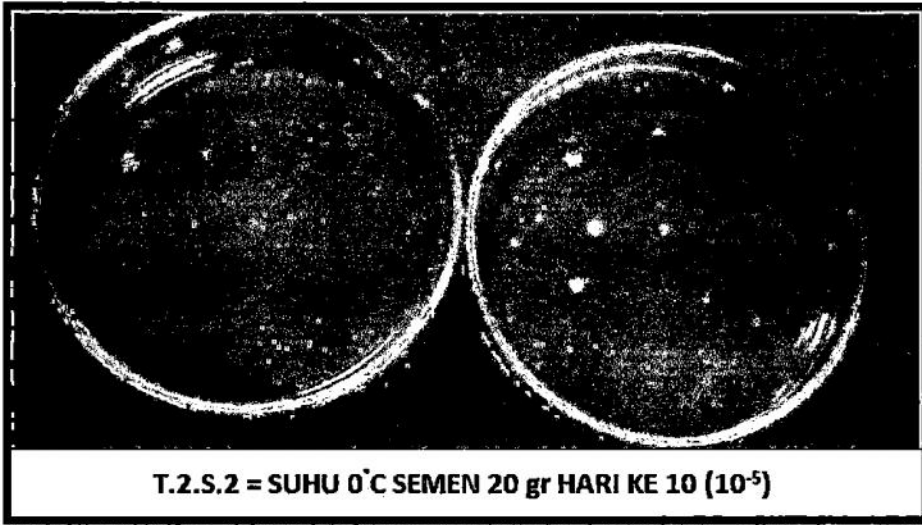


T.2.S.0 = SUHU 0°C TANPA SEMEN HARI KE 10 ( $10^{-5}$ )



T.2.S.1 = SUHU 0°C SEMEN 10 gr HARI KE 10 ( $10^{-5}$ )





**Lampiran 6. Foto pemanenan, pengangkutan, pembersihan dan penyortiran kubis.**

**Kebun kubis (Kopeng, Magelang, Jawa Tengah) :**



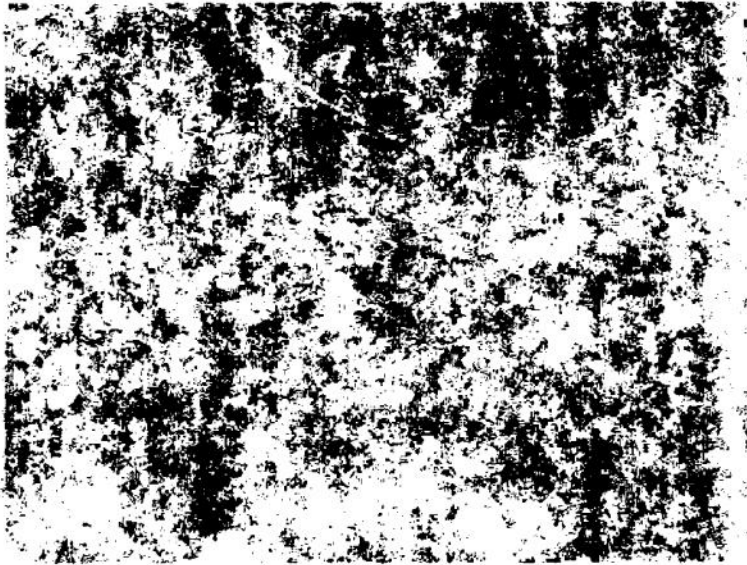
**Proses pemanenan kubis :**



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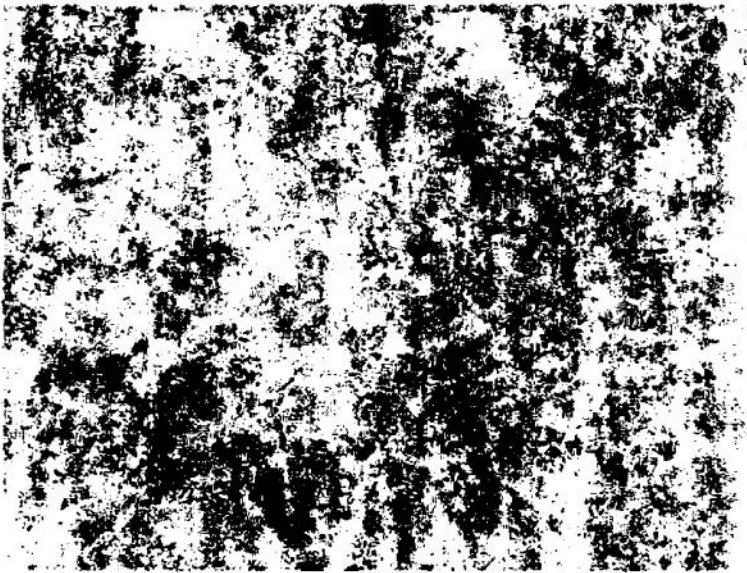
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**Pengangkutan kubis :****Pembersihan dan sortasi :**