

at 200

2 hrs versus  $\$$   $\$$  0.06  
0.342

2 hrs abs.  
0.28 + 10%

6 hrs versus 2 hrs  
in 0.600

10 mg per liter Trapp  
versus water

0.200

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500 g/liter 2.5 10%  
in Chromat.

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overnight collection

u

u

Western 30 is about 3 hours  
per year.

than budget  
(80)

Microscopy  
(Western 3) 2 sec  
~~2 sec~~

320 Magnification  
2

150  
30 frames  
150

50 sec.  $\frac{150}{107} =$

# Effect of Carbon & Nitrogen source on mutation rate

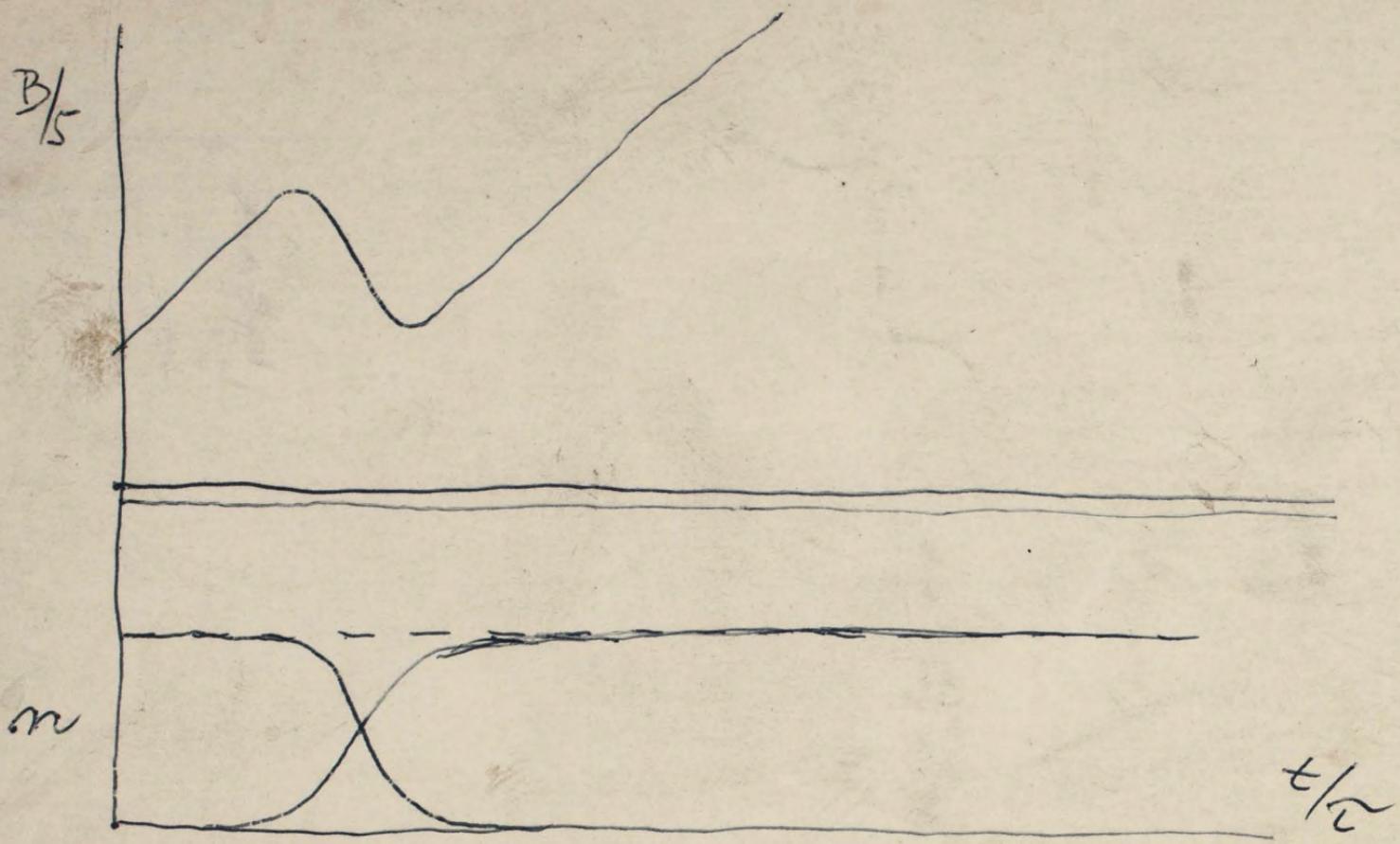
Thom & Steinberg 1939 Proc. Nat. Acad. Sci 25:329-335

Steinberg & Thom 1940 " 26:363-366

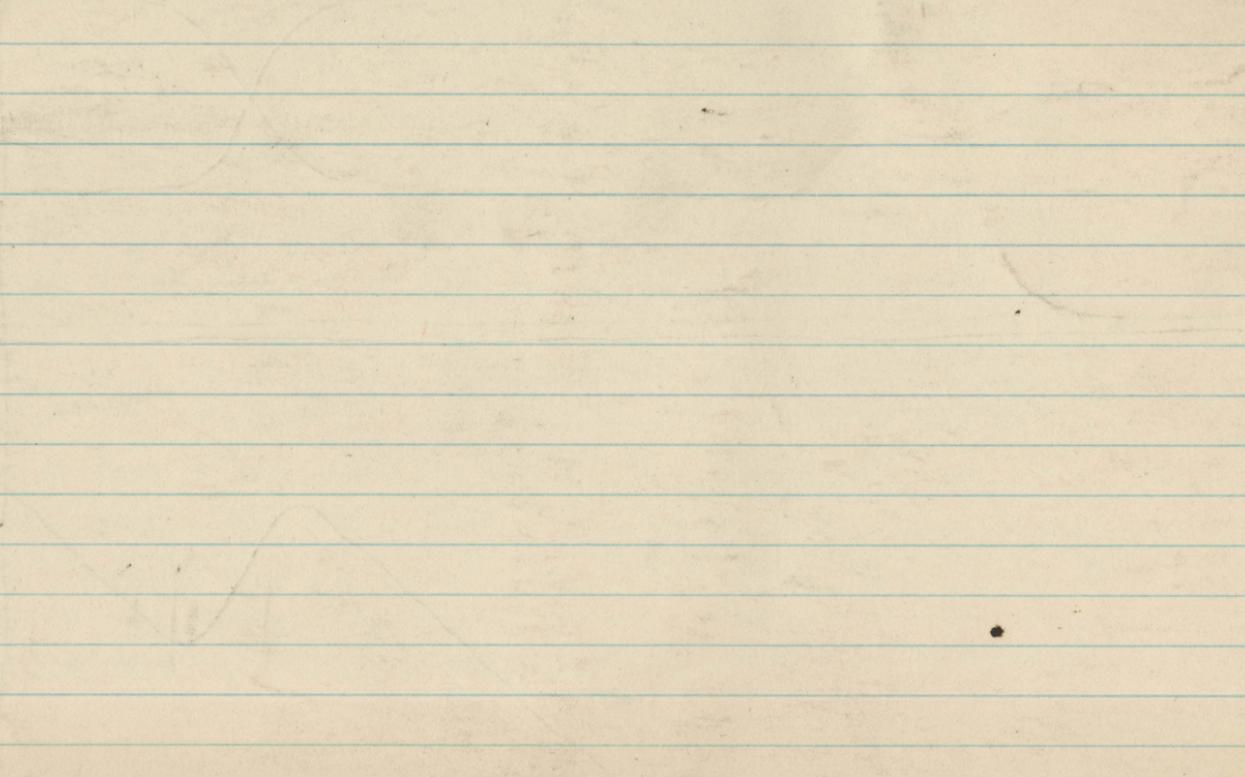
→ 5% d-Mannitol + 0.2% NaO<sub>3</sub> no other C or N.  
also ninhydrin, chloramine, KI, Hexamethylbenzamine

Steinberg & Thom 1942 Journ. agricult. Research 64:645-652

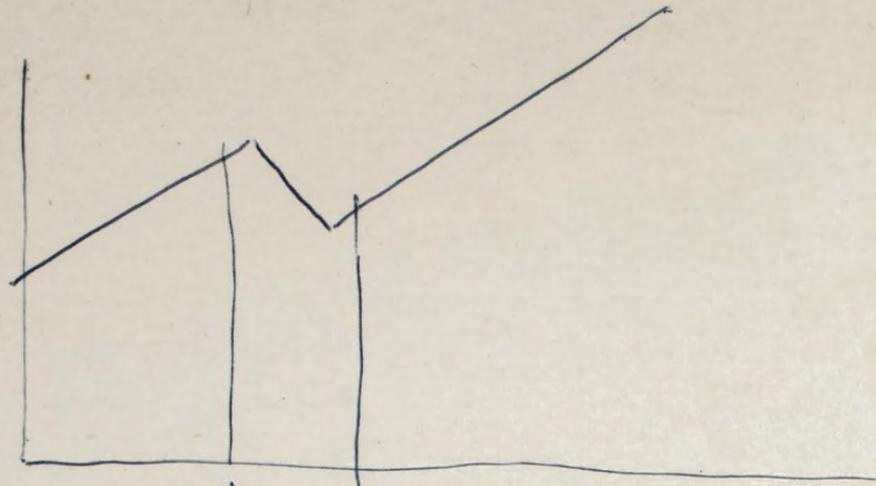
Back mutations with  
dipine, Valine + Threonine



12252  
601

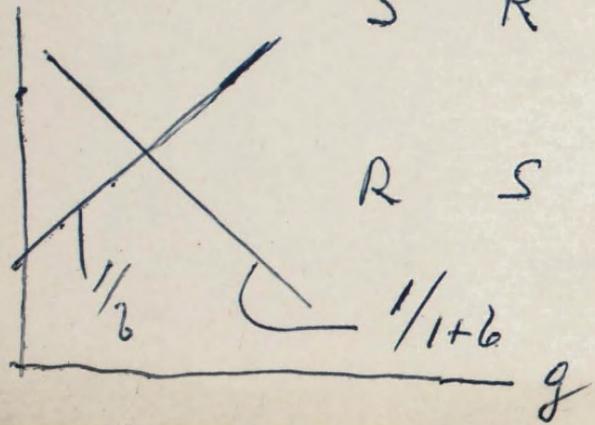


B/5



$$\tau/\tau = g$$

$\ln n^*$



$$n^* = e^{g/2}$$

$$n^* = e^{g/a}$$

$$a = -(1+b)$$

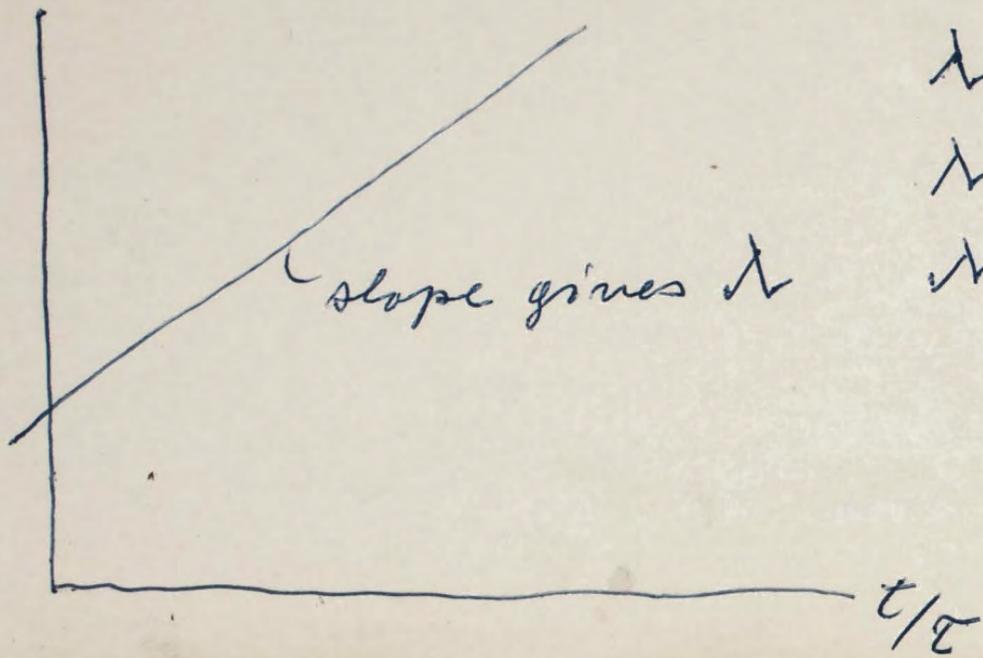
12252  
602



(6)

protein synthesis slower than normal  
down to 1/10<sup>th</sup> of normal rate

mutants resistant to  $\sqrt{5}$  scored



$$\lambda = 2.5 \times 10^{-8} \quad \tau = 2 \text{ hrs}$$

$$\lambda = 7.5 \text{ } \parallel \quad \tau = 6 \text{ hrs}$$

$$\lambda = 15 \text{ } \parallel \quad \tau = 12 \text{ hrs}$$

$$\frac{\lambda}{\tau} = 1.25 \times 10^{-8} \text{ hr}^{-2}$$

12352  
549

L'avenir de la soie - 21

La culture des Vers

Par J. GAUTHIER

n r f

Gallimard

V<sup>e</sup> édition

Kocher Haas

East Kodak

National Aluminate Co

5 Saw Conning  
2 Dow Chemical

Midland  
Midland

Durport

6000

$\frac{3}{112}$

3

~~111~~

~~July 30~~

3000

Oct 15

22

Drop in Apr. 15

# J Effct of cell Phys Supplement

All. Smith Nature 170 {375} 1952 (Apr 30)  
 ref Polge C + Rowson EA Nature 169 626 (1952)  
 (red cells) Slonter HA Nature 169 (1013) 1952  
 Smith AU + Parkes AS Lancet 11 570 (1951)

Dr. Charles Fuchs. Emulsol Corp  
 St 2-8951      59 E Madison.

② Slow } Freezing of Emulsion  
 Fast }

① Emulsicants that are non-toxic

③ Case of emulsification } effect on salts emulsifying

How is the time.

Emulsion + water

How to get sperm in?



Egg yolk + veg oil

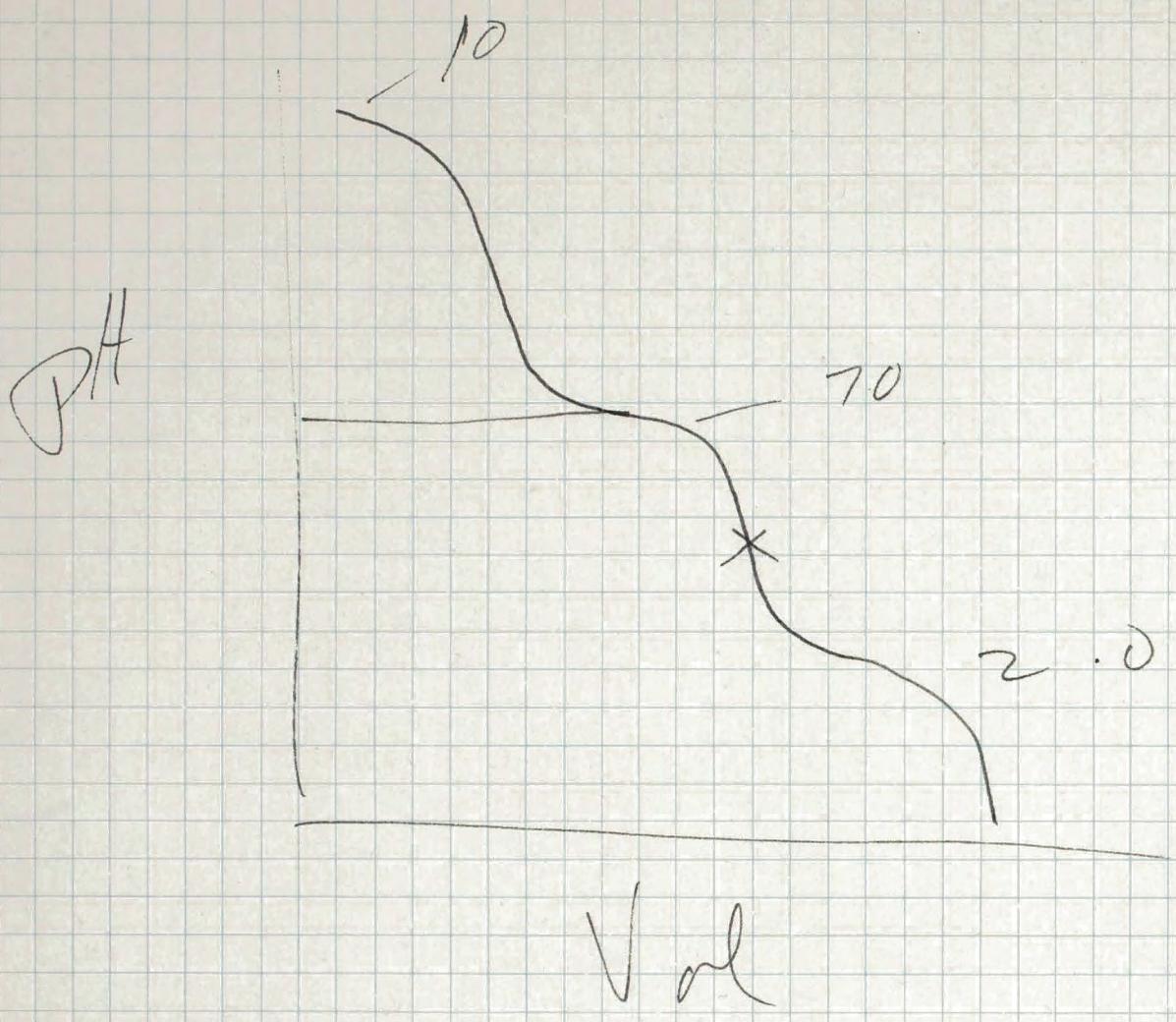
Mayonnaise

Aqueous

refined - mineral oil

di-ester of sebacic acid

isopropyl - fluorophosphate



Journal Cells & Camp Physio

QPI 5867

1) Avery O.T., MacLeod C.M. & McCarty M. Induction of transformation by a desoxyribonucleic acid fraction isolated from pneumococcus type III J exp med 79:137-58 1944

2. Boivin A. Directed mutation in colon bacilli, by an inducing ~~particulate~~ principle of DNA nature, its meaning for the general biochemistry of heredity CSH Symp Quant Biol 12:7-17 1947

3 MacLeod CM & Kraus M.R. Stepwise intratype transformation of pneumococcus from R to S by way of a variant intermediate in capsular polysaccharide production. J exp Med 86:439-53 1947

4) Taylor HE. Additive effects of certain transforming agents from variants of pneumococcus. J exp Med 79:399-424 1949

5) Austrian R & MacLeod CM. Acquisition of M protein & by pneumococci through transformation reactions. J exp Med 79:451-60 1949

6) Alexander HE. & Leidy G. Detail of inherited traits of H. influenzae by DNA fractions isolated from type-specific cells. J exp Med 93 345-59 1951

McCarty M & Avery O.T. Studies on the chemical nature of the substance inducing transformation of pneumococci types: an improved method for the isolation of the transforming substance & its application to pneumococci types II, III & IV. J exp Med 83:97-104 1946

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