
Flax 

- secalina Almond + A<sup>−</sup> → mosaics of brown and a whit.

Al - a<sup>+</sup> → mosaics of black kernels brown.

do. Al - (homozygous q q)

Evidence that Al → a<sup>+</sup>, etc. If so, mutation is denied by the other allele. (rather than somatic loss or crossing over.)


donelson, T. H. 70:90 Development and inheritance of seco logical characteristics in variety 1 of P. vulgar.

Stalk P has antigen; 60 lacks it. Single dominant gene.

P x 60 → same homozygotes which retain antigen 4-8 fissions

zygotic nie.

A<sub>2</sub> x A<sub>2</sub> → slowly developing antigen detectable only after several fissions + increasing to standard label.

Anti-A kills most of

Anti-60 kills most volunteers, but some resists apart.

lost within a few fissions unless continued exposure to serum.

Some retain their resistance (275 qums). Others lose it

more rapidly. Lost at endosperm or fertilization, in 9 fissions

(autonomousization.)

Sum: + Bar + y, and Bar deficiency have no phenotype effect.

The Bar effect is produced by interaction with other loci, which may mutate. The Bar effect may be destroyed by mutation of one of the two interacting loci, followed by separation of these loci through chromosomal rearrangement.

Reversals:

1) deficiency gene duplication, excl. 15A - 16A.
2) inv. 16A - 17A.
3) new sel. change
4) def. 16A - 16A
5) def. 16A
6) idem, long from Y to 16A
7) idem to C.

Similar effects in double Bar.
Grøn, D., J. GP 29: 219 (1946) "Aldehyden Enzyme".

P.A.
The effects of selection toward resistance.

1. Meth increases ap. tumors in hamartomas, lesions in hamartomas, particularly in strains selected for resistance to local tumor formation. An increased mutation rate is also postulated. 
   More line strongly selected for resistance 
   1. More subline, no change. [biotype - punctos?]
   2. By 4 lines, a decrease, but accompanied by an increase mutation rate to susceptibility.

Allium roots 3 da. Incub.

...20,000/ml opt. For penicillin, agar depths less than 5-6 mm, give sharply increasing zones of inhibition, varying with concentration.

The assay value increased at agar depths considerably greater than the apparent radius of diffusion.

8.8 cm plates require 50 ml for 8 mm agar, which is required for uniform results.
Verschwinden eindimensionaler Zellknötzchen von Tetracyclin nach Echolocation.
Methods of counting

Add required supplement to the surface of an agar or gelatin pour plate lacking requirements. E.g. yeast or phosphate ( yeast is more resistant than most vegetative killing under such conditions), etc. double diffusion plates for individual guinea "non-tissue"-intact tissue organ, du coeur, l'intestin, l'ovaire, the condensation. Electrode agar plates, etc. as it subdues inhibition easily discernible. Also suggests dyeing the plate.

Points out the material can do not have to be known. Used large plates for multiple effects.
Malignant cells determined by peritoneal instillation tests. 1 cell needed for transmissibility.

1. Young leukemic mice do not harbor lymphocytes.
2. Some lymphocytes can be found before clinical leukemia.
3. Thymectomy reduces incidence leukemia (ca 50 to 10%). Do: underfeeding. Splenectomy is effective. Does not influence transmissibility. May have indirect effect in inhibiting tumor growth.
4. Underfeeding reduced incidence from 65 to 10%. Also ineffective transference. May have leukemic cells by necessary evidence of leukemia rarely in bone marrow, probably not typical reticulum.
5. Treated leukemic mice: a. X-Irradiation reduces score.
   b. Ideal +, lymphoid which do not develop against.
   Develop in 70-100 days. contain lymphocytes a short time before leukemia develops.
Eek, WR, AAAS Lecture 1944:139.
A summary of certain data on the products of malignancy in vitro
Adel, ZF, and HR Buerchl. J. Biol. 51: 791-2 (1946) The biotin requirements of Neurospora crassa

Only biotin required opt. 1.000 m/ml
Pepeo - Teodorq, R. + M. N. Nichelson, "Uakt 51.59 s. 1946"

Recovery of vitamin from cultures of acetone, butyl ale, bacteeri.
Synthe. medium.

75-80% recovery. 15-20% in medium.

Acid hydrolysie or paper - diastase are best methods.
Kleinbergen Motel 1 1945

J. Bast 30:301

Z. Bast 1240 (mis cultures)

ID 54:313.
The inhibition of the spreading of growth of Proteus and other bacteria to permit the isolation of associated streptococci.

a) Fry's technique of pouring layered plate
   1. Poured over a layer with a top layer

5% NoCl inhibits spreading but not growth markedly.
   (probably due to diffusion of water - as mid. 6h/8h)
   (probably not a good idea)

Hydride inhibits spreading at 10^-4 but growth as well.

Alcohol 5% inhibits spreading but not growth.

[Settling was Proteus phages.]

Fry - BJEP 15:456-7 (1932)
Many strains require tryptophane. Carrier medium. Tryptophane does not affect rate, or final growth, but only lag. Replaceable by lysine in one strain. Tryptophane assay increased after growth. Na+ response similar.

\[ \text{Na}^+ \text{ requires similar:} \]

Na+ N, N variation affected both rate + amount. Glucose was all or none.

\[ \text{NH}_4\text{SO}_4, \text{ NaCl, } \text{KH}_2\text{PO}_4, \text{ glucose} \]

\[ \text{higher} \]

\[ \text{drop rate shades to low tryptophane.} \]

\[ (\text{selection?}) \]

see Demerec 1939.
Plough, H.H. CSH. 9:127 (1941) Spontaneous mutability in Droso phy.

Bohrer - treatment of larvae, phenotypic soter which seed soter was found.

' 'reminiscence somatic + germinal mutation," removed.!
Blumen, A. Real II, 48: 641-8 (1928). Einige Fragende Worte zum Hydroteria- 
griff. (Harrison, 1931)

see Bauer.
fellblade, M. Rel. Res. 21:30 - 1946. Bacterial response or bacteriophage
Winge, O. Ch. Carlsberg 24:79-95 (1944) - segregation and mutation in yeast.

S. cerevisiae - only ½ spores survive. (lethal?)

S. urosepsis - (single spore form) probably varying regurgant.