

Evolution through Lamarckism

Lamarck coined the term biology & proposed 4 postulates collectively called Lamarckism.

↑ size of organism due to internal vital forces

① ~~Large~~ Living organism/organs tend to increase in the size because of internal vital forces.

Use & disuse of organ.

② New organs developed when it is requirement of survival.

③ The frequently used organs will developed more.

Acquired modification inherited

④ Acquired modifications during the life of an individual are inherited. (The cumulative effect of these modifications result in the speciation)

Classical example of Lamarckism: —

- ① Reduction in ~~no~~ the no. of digits in the limbs of horse.
- ② Flightless birds
- ③ Limbless snakes
- ④ Shorter size of ear pinna in humans.

The Weismann & Cuvier challenged the Lamarckism with the following questions:

- ① Why do tailless mouse produce tailed mouse.
- ② Why donot eyes of the man become enlarged.

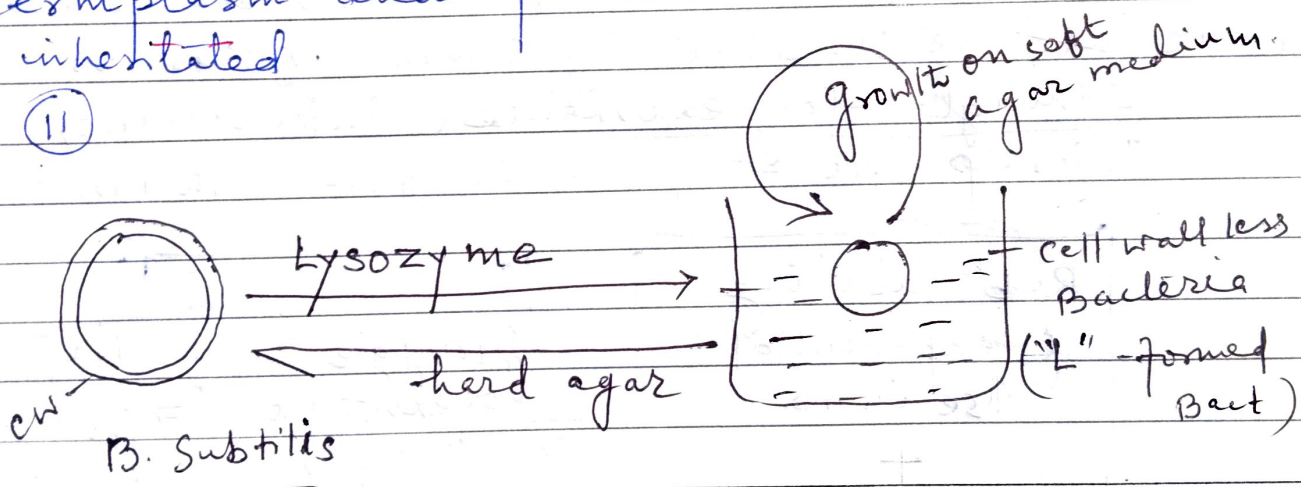
(III) why does the man devoid of wings even its has been desire.

IV Neo-Lamarckism:-

Many Scientists reported the ~~legitimate~~ ^{legitimate} view of Lamarck with experimental evidences and Lamarckism took the new shape known as ~~Neo-Lamarckism~~ Neo-Lamarckism.

(I) Mulax performed mutagenesis exp. in the germplasm and found that these mutations are inherited.

(II)



(III) The somatic mutations can be inherited in a sexual progeny / clones.