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Introduction: Millions of people consume rice daily and it's one of the most consumed products worldwide. Nowadays, weevils are causing many problems to rice producers and they are losing tons of product. The factor that has caused the greatest growth is the global warming due to the global increase temperature. Finally, the strategies used by the producers are not the most suitable, for this reason, we will seek an effective solution to combat weevils.

Objectives

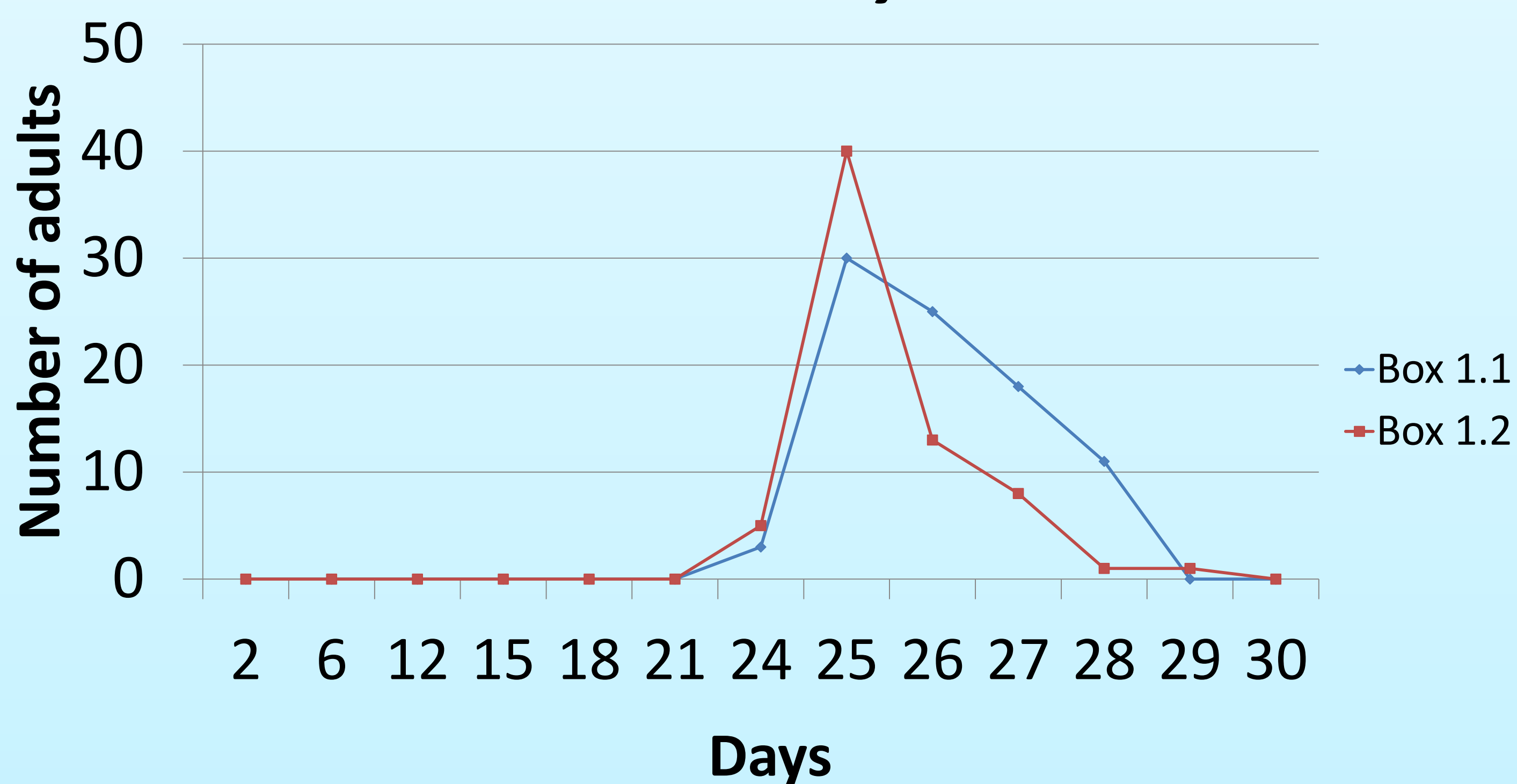
- 1-Find a microwave treatment that inhibits the growth of *S. oryzae* larvae in rice.
- 2-Evaluate the growth time of *S. oryzae*, *T. castaneum* and *O. surinamensis*.

Methodology

- 1-Days of growth
 - 2-Number of adults
 - 3-Weevil used in the second experiment
- First experiment
- ↓ Relationship
- Second experiment

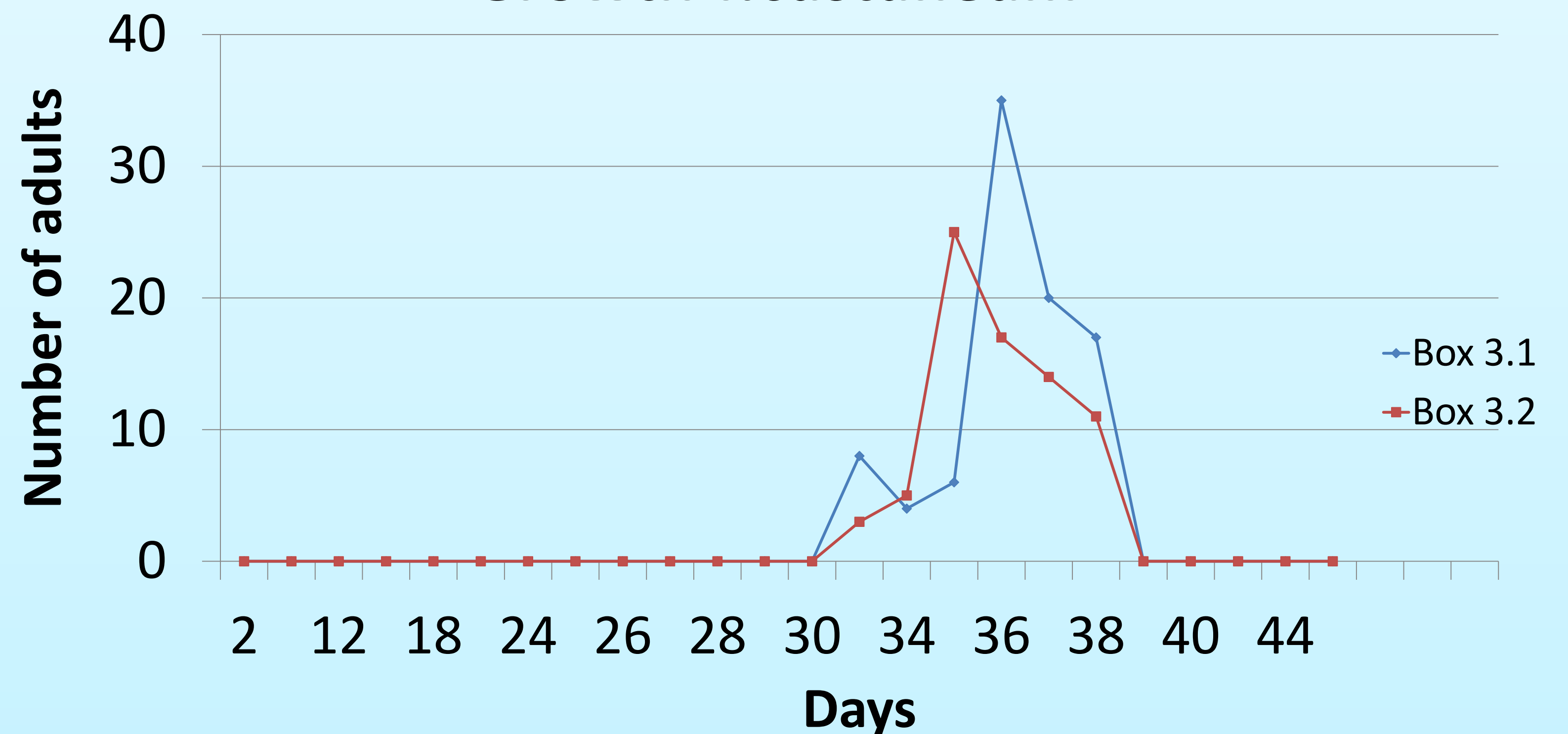
Results

Growth *S.oryzae*



2-Time of growth between 24 and 29 days.

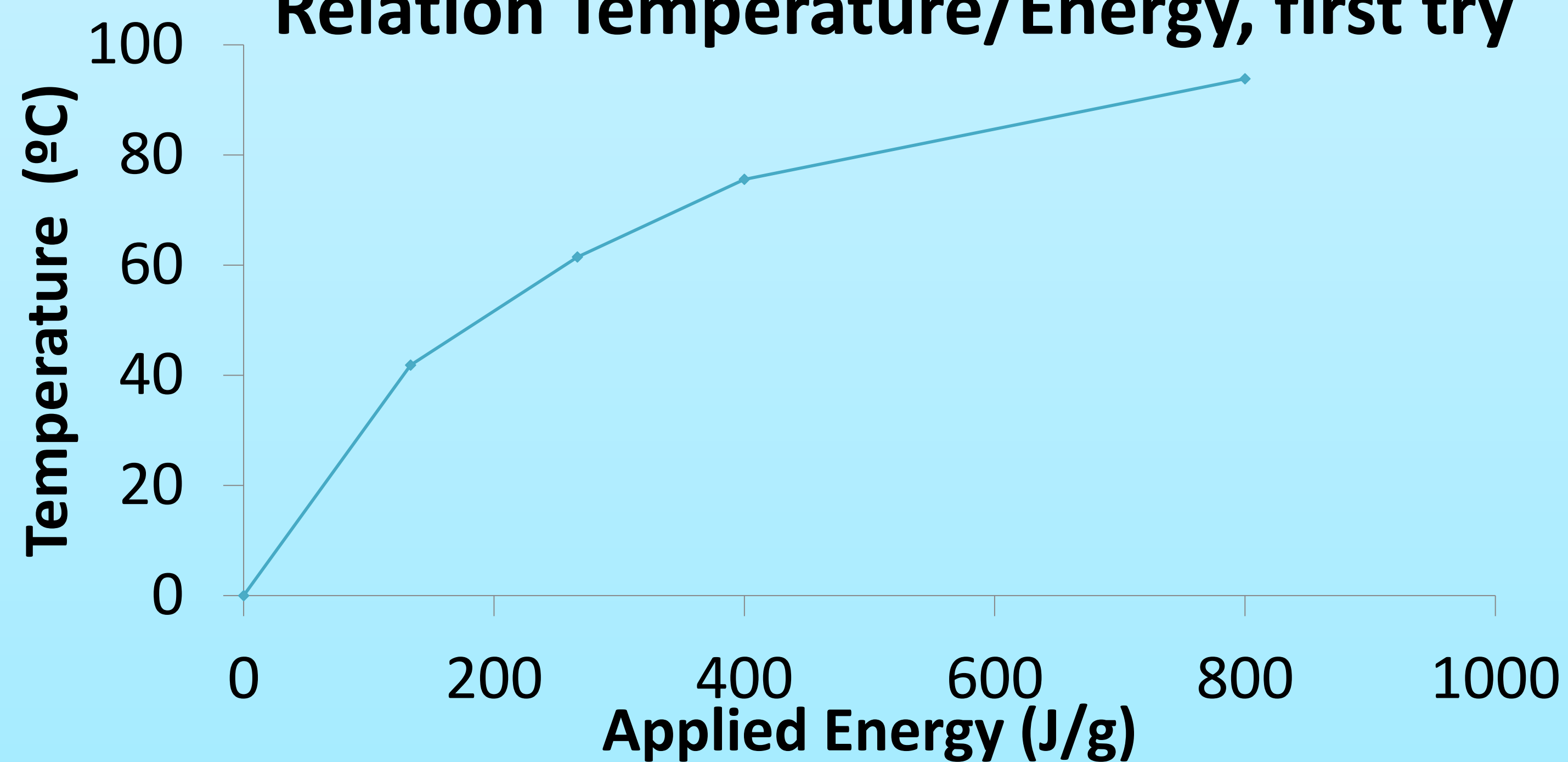
Growth *T.castaneum*



3-Time of growth between 33 and 39 days.

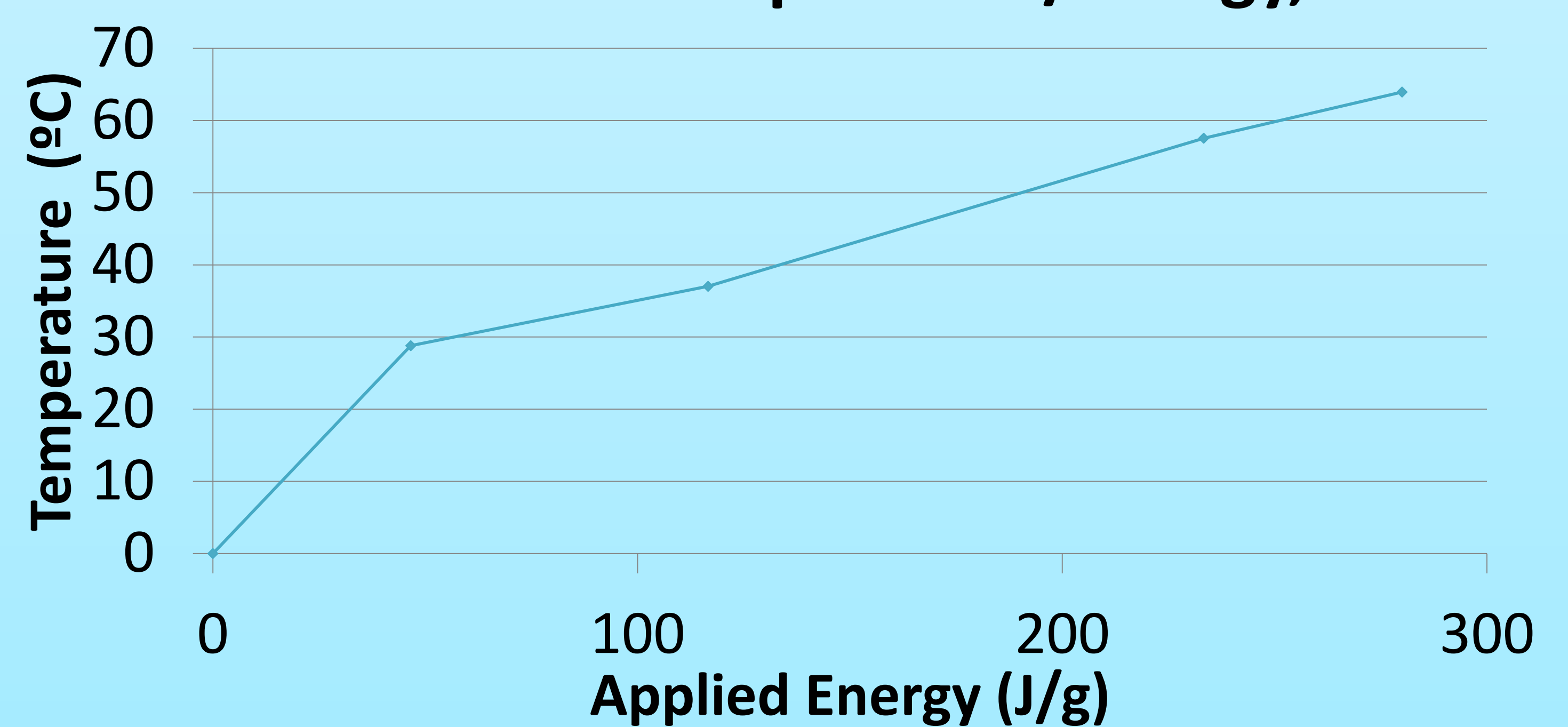
1-*O. Surinamensis* no growth.

Relation Temperature/Energy, first try



In this first try, the applied energy was excessive.

Relation Temperature/Energy, Second try



The applied energy has been reduced but there hasn't been growth

Conclusions:

- 1-The main objective has not been achieved, however, in the specific objective we have obtained results.
- 2-Limitations: time, technology.
- 3-In the future, we can change the food used, which also implies a change in the weevil.