Exercise on the population dynamics of the pine processionary moth *Thaumetopoea pityocampa*

Student name:

Fill in and send to andrea.battisti@unipd.it or through Moodle by November 17.

Question to answer in max 2-3 lines of text

1. Describe the life history of the organism.

2. Describe the fluctuation of density for the data series of Trentino, with particular emphasis on the assumption on the use of infested area and the magnitude of the variation.

3. Formulate hypotheses about the factors affecting the population dynamics, both density dependent and independent.

4. Apply the population growth model (R) provided in the Excel file and test the hypotheses. Use graphic analysis as you like.

5. Discuss the results and summarize the conclusions for practical applications.