Methods:

Caterpillar rearing and generation shit

Hemocyte extraction

As per USDA protocol, larvae were initially placed at 4°C for 30 minutes. Once the insects had slowed down, larvae were transferred a tray on ice for hemocyte extraction. The fourth abdominal prolegs were sterilized with ethanol and then amputated using surgical needles. Hemolymph from the incision was allowed to pool for collection. Once hemolymph was extracted, the solution was mixed with a chilled anti-coagulant saline solution in a ratio to insure at least 10 µl of solution were present (usually a ratio of 1 hemolymph: 2 anticoagulants. The solution was then placed on a Hemocytometer for counting under a 40x magnification lens. A (MODEL OF CAMERA) was used to photograph 5 of the 25 squares for estimating the total number of hemocytes.

Machine learning/use of model?

Data augmentation