

MALE DEER TICK ANALYSIS

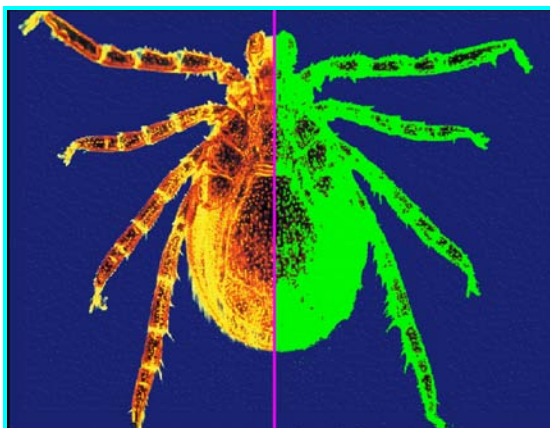


Figure 1: a) Original image after the application of a Delineate gray instruction. b) Green binarization of tick by Gray Thresholding.

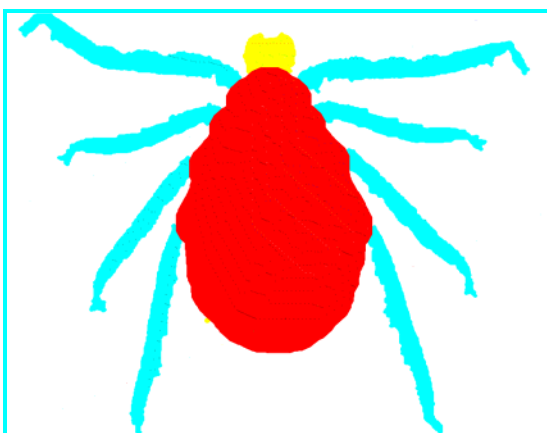


Figure 3: An Object Transfer by Limits based on aspect ratio was used to isolate the head from the legs. Every part of the tick was measured and compared to the whole body.

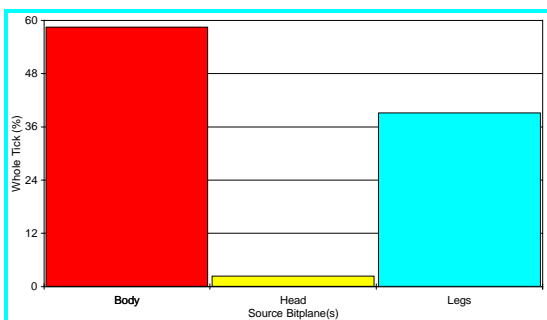


Figure 4: Area percentage of body, head and legs compared to the whole tick.

Sample Description

One male deer tick.

Purpose of Analysis

Demonstrate the ability of the image analyzer to analyze all parts of the tick.

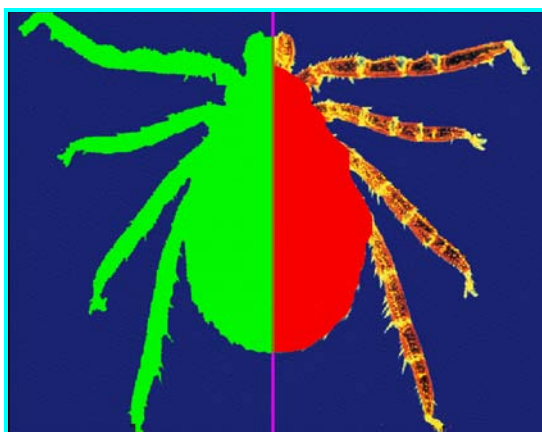


Figure 2: a) Artifacts were removed and the body was filled (Trap, Closing, Fill). b) The main body was isolated by applying an important Opening binary operation.

Results Summary

| | Length of Legs (microns) |
|--------------------|--------------------------|
| Minimum | 895.4 |
| Maximum | 1248.9 |
| Mean | 1097.0 |
| Standard Deviation | 139.3 |

Apparatus

Image Analysis
System: Clemex IMPAK Software
Scanner: Epson ES-800C