

Analysis of detailed images

Cell segmentation

- Find region of interest
- Transform rectangular region of interest into adaptive color space
- Detect exact cell boundary

Haustoria segmentation

- Enhance contrast of the segmented cell image via morphological operations
- Binarize enhanced image based on color saturation

Haustoria classification

- Extract shape features
- Transform feature vector into one dimension via LDA
- Classify object on axis of maximum discriminance