

CORN FLOUR ANALYSIS

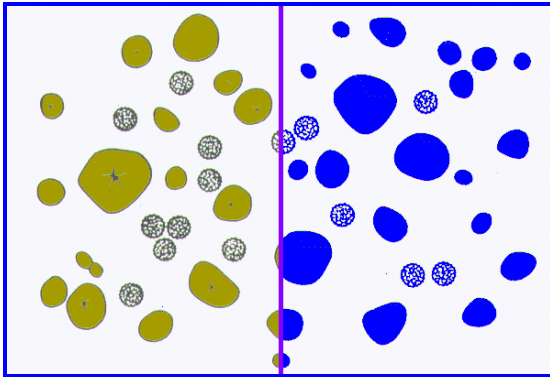


Figure 1: a) Original image. b) Corn flour and smut spores were binarized in blue (Gray Thresholding).

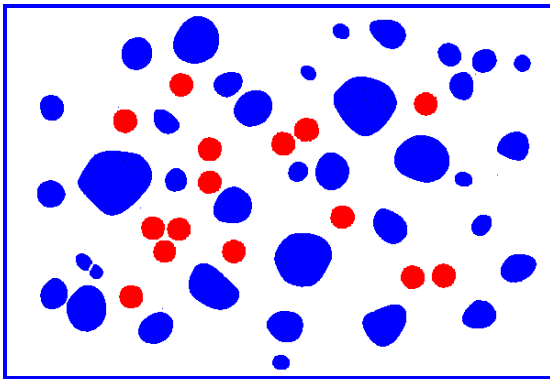


Figure 3: Holes and artifacts were eliminated from the blue bitplane (Fill, Trap).

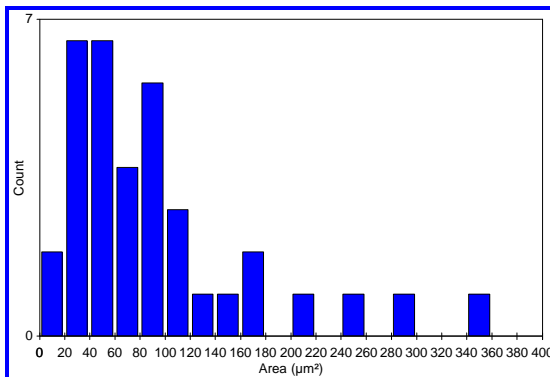


Figure 4: Area distribution of corn flour.

Sample Description

Corn flour spoiled with corn smut spores.

Purpose of Analysis

Demonstrate the ability of the image analyzer to discriminate smut spores from corn flour and to perform size and shape measurement on them.

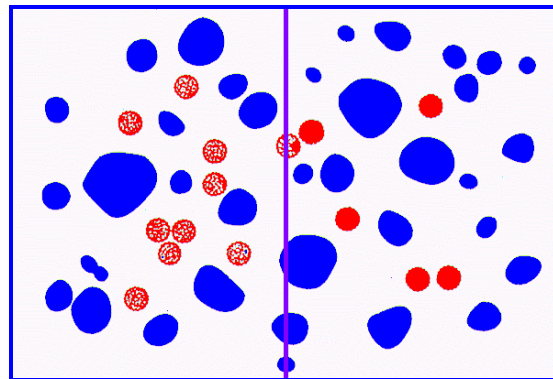


Figure 2: a) Corn smut spores were isolated into red bitplane using an Object Transfer by Limits instruction based on compactness. b) Red objects were completed by a Fill binary operation.

Results Summary

	Area (microns ²)
Minimum	15.3
Maximum	356.4
Mean	91.9
Standard Deviation	78.1

Apparatus

Image Analysis

System:

Clemex IMPAK Software

Scanner:

Epson ES-800C