SOFTWARE TO COLLECT BIOMETRIC DATA FROM IMAGES

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Introduction

We have developed software to facilitate the measurement and collection of data for biological research on microscopic communities or cellular processes. Below are examples of 4 applications.

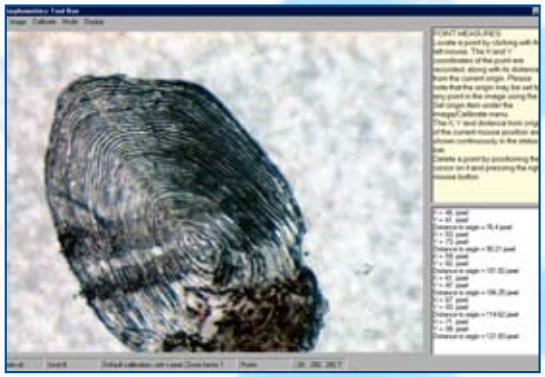
The main advantages are:

- Measurements are displayed as overlays on live video images
- Electronic zoom to examine detail
- Direct export of data to Microsoft Excel or database
- Image capture for quality control

1) Working interface for Morphometric Tool Box (MTB) to measure growth increments in trout scales

Features

- Help dialogue displayed for each operation
- Data output display stored to Excel
- Operator defined origin ● for line
- Growth increments between rings ●
- Other measurement routines available include angle, line, circle etc.

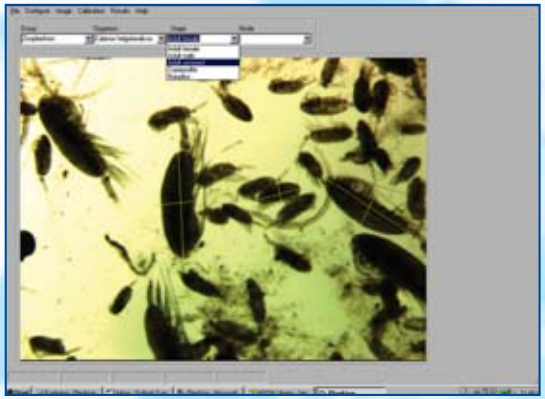


Estimation of growth increments in trout scales using Morphometric Tool Box software.

2) Working interface for Biometric Tool Box (BTB)

Additional features

- Database to record measurements for many types of object with two levels of classification
- Lengths and breadths

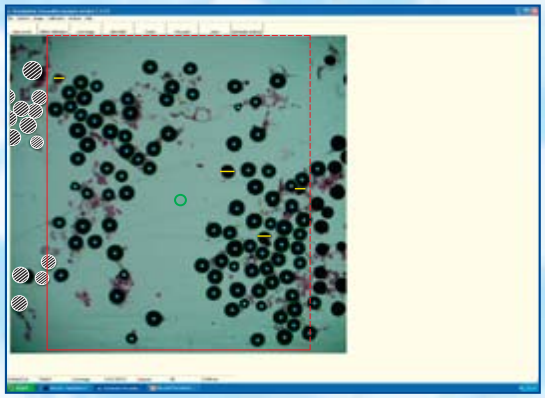


Size frequency measurement of marine copepods by development stage in plankton samples.

3) Working interface for gravimetric fecundity analysis (GFA)

Features

- Automatic counting and measurement of objects
- Manual editing and measuring
- User defined scale display ○
- User defined measurement field within the overall field of view
- Overlays show previous (▨) and current (⊙) objects counted in the field of view.
- Objects to the right of the field not touching the red vertical boundary will be measured in the next field when the sample is shifted left to a new field.

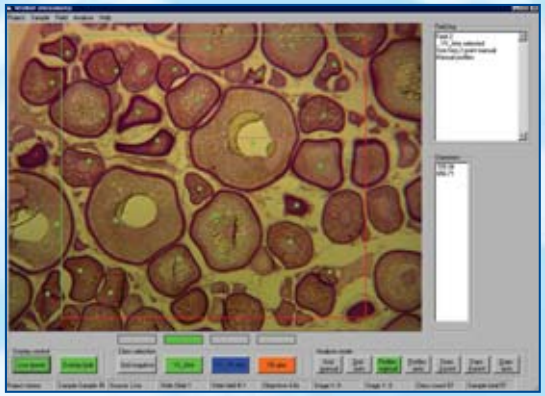


Cod oocytes stained to facilitate automatic measurement.

4) Stereometry by Weible and Dissector principle

Features

- Live grid overlays superimposed on the slide □
- Point counts recorded to determine numbers per unit area by class
- Distance measurement



Section of a mackerel ovary stained with PAS Mallory.

For further details or to discuss your application contact:

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