

# WARD'S

## Dichotomous Key to Mixed Algae

86 W 3018

86 W 3020

### Instructions

Students may find it helpful to use a slowing agent, such as WARD'S Detain, to slow motile algae for extended, careful observation. The wet mount preparation should first be "scanned" under low power magnification to initially locate cells for observation and identification. In some cases, identification will be made easier if the organisms are examined under 450X magnification.

Identification of an alga may be made by either comparing the observed cell to the illustrations or by using the key. The key gives the student two choices per number. Start at step 1, comparing the observed alga to each of the characteristics stated. Follow the directions on the key, comparing each specimen, until you reach a step that identifies the alga.

1. Cells do not contain chloroplasts, but have blue-green pigments seemingly distributed and diffused throughout the cell ..... 2  
Cells contain chloroplasts with green pigments ..... 3
2. Filamentous cells are wider than they are long ..... Oscillatoria
3. Cells are arranged in filaments ..... 4  
Cells are not arranged in filaments ..... 5
4. Cells have distinctive green spiral-shaped chloroplasts ..... Spirogyra  
Cells have bandlike chloroplasts ..... Ulothrix
5. Cells are in groups ..... 6  
Single cells ..... 7
6. Groups of four or eight cells with rounded or pointed ends ..... Scenedesmus  
Spherical or oval colony with 8-32 pear-shaped, bi-flagellated cells in each colony ..... Pandorina
7. Oval-shaped cell with two conspicuous flagella ..... Chlamydomonas