

Carolina™ Kits for Genetic Studies

Aspergillus nidulans

Crossing Kit

For a class of 30 students. A fungal genetics kit helps students understand gene linkage and genetic recombination (crossing over) using *A. nidulans*.

A. nidulans is a filamentous ascomycete fungus ideal for genetics laboratory teaching. *Aspergillus* has a rapid asexual life cycle: spores inoculated onto a plate of medium will grow into a colony which has produced new spores (conidia) in just 2 days at 37°C. The strains produce either green or yellow conidia, causing the colonies to be either green or yellow. As *Aspergillus* is also an eukaryotic organism, meiosis as well as recombination can be introduced in conjunction with the use of the kit. Teacher's instruction manual is included. Materials needed but not supplied are dissecting microscope, 37°C incubator, masking tape, Bunsen burner, and vortexor-mixer (optional but recommended). *Kit contains coupon for prepaid delivery of perishable materials. Return coupon at least 2 weeks prior to requested delivery date to ensure prompt arrival of materials.*



- Aspergillus nidulans* Mutant Strain A1057 Slant Tube Culture
- 30 Sterile Distilled Water Tubes (8 mL)
- Aspergillus nidulans* Mutant Strain A1058 Slant Tube Culture
- 20 Sterile Petri Dishes (60–15 mm)
- 7 *Aspergillus nidulans* Complete Medium Bottles
- 80 Sterile Petri Dishes (100–15 mm)
- 3% Agar Bottle
- 50 Graduated Transfer Pipets (1 mL)
- Minimal Medium + Biotin + Ammonium Tartrate Bottle
- 10 Lazy-L-Spreader Packs (10 per pack)
- 2 Minimal Medium + Biotin + PABA Bottles
- 10 Sterile Toothpick Boxes
- 2 Minimal Medium + Biotin Bottles
- An autoclave disposal bag
- 2 Minimal Medium + PABA Bottles
- Metal Scalpel
- 10 Group Scoring Sheets (in teacher's manual)
- 10 Metal Inoculating Needles
- 10 Group Recording Sheets for Parental/Recombinants (in teacher's manual)
- Class Recording Sheet for Calculating Linkage Distances (in teacher's manual)

CT-15-5830 Per kit \$189.00

ORDER TODAY!

Phone: **800-334-5551**

Fax: **800-222-7112**

Online: **www.carolina.com**

All prices f.o.b. shipping point and subject to change without notice.

Sordaria Genetics Kit

Designed for a class of 30 advanced students. Students will culture the 3 *Sordaria* strains and then set up cross-plates of wild-type × mutant tan and wild-type × mutant gray. The gene-to-centromere distance for tan and gray genes can then be calculated. Requires the use of a compound microscope. With teacher instructions.

- Sordaria fimicola* Tube Culture (wild-type)
- Sordaria fimicola* Tube Culture (mutant gray)
- Sordaria fimicola* Tube Culture (mutant tan)
- Cornmeal-Glucose-Yeast Extract Agar Bottle
- 3 bottles *Sordaria* Crossing Agar
- 20 Sterile Petri Dishes
- Autoclave Disposal Bag



CT-15-5848 Per kit \$45.00

Squashed perithecium of *Sordaria* exposing asci. From CT-15-5847 *Sordaria* Genetics BioKit and CT-15-5848 *Sordaria* Genetics Kit.

Sordaria Genetics BioKit®

A cross of the wild-type *Sordaria* strain with the mutant tan strain is made. Hybrid asci are produced containing 4 dark- and 4 light-colored ascospores. Tetrad analysis is used to calculate the gene-to-centromere distance in map units for the mutant tan gene. The exercise requires about 10 to 14 days from setup of cross-plates to completion. Requires the use of a compound microscope. The **Classroom BioKit®** is designed for a class of 30 students; the **Demonstration Kit** is for individual use by the teacher or by a student. With instructions. Each kit includes a card for requesting the prepaid delivery of perishable materials. *Please return the coupon at least 2 weeks prior to the requested delivery date to ensure prompt delivery.*

- Sordaria fimicola* Plate Culture (wild-type)
- Sordaria fimicola* Plate Culture (mutant tan)
- 4 bottles *Sordaria* Crossing Agar
- Metal Scalpel
- Coverslips
- Microscope Slides
- 20 Sterile Petri Dishes
- Instructional Slide (35 mm)
- Toothpicks
- Autoclave Disposal Bag

CT-15-5847C Classroom BioKit® Each \$63.50

CT-15-5859 Demonstration Kit Each \$23.00

Sordaria Genetics Set

Includes the 3 *Sordaria fimicola* strains for genetic crossing studies in plates: *Sordaria fimicola* Wild-Type, *Sordaria fimicola* Mutant Tan, and *Sordaria fimicola* Mutant Gray.

CT-15-5858 Per set \$26.95



CT-15-5858 *Sordaria* Genetics Set

Carolina Biological Supply Company 2700 York Road, Burlington, NC 27215