

**LTSN Centre for Bioscience
Bioscience Learning and Teaching 'Good Idea' Abstract**

Title of good idea:CyberSlug - A Computer Based Key to Slugs

Keywords: Identification, Mollusca, pest species

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Main features of the good idea: i.e. What was the initial prompt/problem? How did you implement the good idea? What are the gains and losses? Please include any relevant references including website links.

The initial problem was that in running student projects involving the use of slugs I was becoming inundated with having to identify all the slugs my students were using. The available keys (AIDGAP) were not easy to use and in any event pre-dated the description of some species, particularly some Arionids.

My solution was to develop a computer based key which depended on pictures (photographs) rather than descriptive terms and had unknown slugs built in so that students could do a few dry runs and test their accuracy. Slugs can be easy to identify so a very simple key (a boolean, quickstep key) using only 4 characters was developed. An extension of the AIDGAP dichotomous key was also implemented. Finally a multiple entry key to each of the families was included. The multiple entry key gives the most reliable outcomes but is the least trusted by students.

Gains

This key makes the identification of most slug species relatively easy and where it is not so easy gives very clear warnings that problems are likely. The pictorial basis for identification makes it very easy for beginners without detailed knowledge of terminology.

Losses

This took so long to develop that my teaching role changed and this type of study no longer takes place at the University of Ulster. The key is in use, however, at the Long Ashton Research Station (University of Bristol) in professional development courses.

The key is available on a CD ROM which includes photographs of all common slug species in North-West Europe. It runs on both MAC and PC platforms.

Screen grabs available at <http://socrates.edsc.ulst.ac.uk/Tony/Tony.html>