

Unit 2.3: Our school herbarium

Purpose and scope

This is a key unit that incorporates both field and classroom activities, designed to stimulate students' observational skills and investigative minds and foster their ability to work scientifically as individuals and collaboratively.

The development of the herbarium requires the students to reflect, extend and communicate the knowledge and understanding they have acquired in previous lessons. While the collection of plant specimens and field notes require keen observations, the preservation of specimens and documentation of information require patience and careful procedures following standard botanical guidelines.

Students may also choose and apply information and communication technologies (ICTs) to storage, analyze and present the data and information they have collected, and contribute to the pool of knowledge through the *What Native Plant is That?* website.

The "finished" Herbarium Plus folders may be selected for display at the annual Sunshine Coast Spring Wildflowers Festival. The folders are to become an ongoing and expanding resource of and for each school as students of the next year follow through the lessons and add to it. It also paves the way to further studies in many other aspects of botanical, ecological and environmental science.

Essential Learning and Assessment Focus for Science

By the end of Year 5:

Living things can be grouped according to their observable characteristics.

- Students may be able to identify key plant families.

By the end of Year 7:

Systems of scientific classification can be applied to living things.

- Students may acquire basic knowledge on plant classification and the use of dichotomous keys.

By the end of Year 9:

The diversity of plants and animals can be explained using the theory of evolution through natural selection.

- Students may conclude that all *Acacia* plants (or Eucalypts) would have had a common ancestor.

Assessment Strategy for Core learning Outcomes in Science

3.2: Students present information which illustrates stages in different types of life cycles of familiar living things. Students may:

- demonstrate how pollination takes place;
- demonstrate how a plant reproduces asexually

4.2: Students identify and analyse similarities and differences in the ways that different living things reproduce. Students may:

- discuss and describe methods of pollen transfer and seed dispersal in various plants;
- identify differences between sexual and asexual reproduction