HOW CAN WE GET MORE YOUNG PEOPLE INTERESTED IN PLANTS?

Introduction

The importance of plants in a global economy is increasingly being realised and as a result we are having to face difficult plant science problems. These include the effect of global warming on plants especially on crops, the conservation of habitats and of germplasm, the problem of how to feed a projected world population of 10 billion by the year 2100 and decisions about the release of genetically engineered plants into the environment.

Science education has a vital role to play in cultivating a positive approach to these problems. However, many young people think that plants are boring, few of them understand the importance of plants and only a very small number of them consider a career in plant science.

The Science and Plants for Schools (SAPS) programme has been set up in the UK to work with school teachers on the development of exciting practical work in plant science. SAPS is funded by the Gatsby Charitable Foundation which is one of the Sainsbury Family Charitable Trusts.

The SAPS programme:

- is working with science teachers to develop practical investigations in plant science for the National Curriculum and at "A" level
- runs workshops for teachers which show, through hands-on practical work, how teachers can use plants to support exciting science teaching
- offers secondment to suitably qualified and experienced teachers so that they can help to develop curricular material for plant science. The seconded teachers also help to organize and run workshops
- has developed an educational kit which schools can use to grow a rapid cycling variety of *Brassica campestris* (syn. *rapa*) L.

  These remarkable plants, which were produced by Professor Paul Williams at the University of Wisconsin-Madison in the USA, are grown under lights and complete their life-cycle, from seed to seed, in just five weeks. The plants are suitable for studies of plant reproduction, genetics, growth and development, nutrition,

evolution and ecology and are being grown in well over 100 schools in the UK

- sponsors selected schools which, in exchange for a grant towards the cost of building a light bank and a free kit for growing rapid-cycling *B. campestris*, are asked to work on specific areas of interest in plant science and to provide feed back to SAPS
- publishes a regular newsletter containing ideas for interesting practical work in plant science, a forum for the exchange of ideas
- is forging links with universities, college and other plant science research institutions in order to provide a channel through which science teachers can have access to information on the very latest discoveries and techniques in plant science.

One junior school teacher has written "The plants captured the imagination of very mixed groups of ten and eleven year old juniors in a way I had not thought possible. By popular request the children are repeating the work this term with their own self-harvested seeds in order that they can try further investigations of their own devising. Mustard and cress have never had this impact!"

A high school teacher said "The bright lights and yellow flowers were marvellous publicity. The biology staff were particularly impressed and are using "fast plants" for the applied genetics option. The outcome is considerable enthusiasm for plants and a number of students are using the plants for their projects."

Conclusion

We believe that, in addition to rapid-cycling brassicas (fast plants) many other plants make good experimental material for use in schools and we are anxious to hear from anyone who has developed interesting and stimulating practical work in plant science.

References

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