

OLLSCOIL NA hÉIREANN

NATIONAL UNIVERSITY OF IRELAND, GALWAY

SEMESTER II EXAMINATIONS, 2002

THIRD-YEAR SCIENCE**BOTANY**

BT307: Plant utilization and biotechnology

Professor M.J. Dring
Professor M.D. Guiry
Professor P.M.T. Curran
Dr M. McDonald
Dr D. Stengel

Time allowed: *Three hours.*
Answer *four* questions.

1. Write a concise account of auxins.
2. Explain the rôle of second messengers in signal transduction in plants.
3. Discuss the use of callus in plant tissue culture.
4. Describe the economic importance of the fucoid *Ascophyllum nodosum* in Ireland. Which biological features are relevant to its sustainable exploitation?
5. Describe and contrast the seaweed industries of France and the Philippines.
6. Write an account of the sources, production and uses of agar.
7. Give a detailed account of the micromorphological symptoms of wood decay caused by marine fungi. Illustrate your answer.

OR

Write an essay on the preservation of wood in the sea.