

**OLLSCOIL NA hÉIREANN, GAILLIMH**  
**NATIONAL UNIVERSITY OF IRELAND, GALWAY**

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**SEMESTER I EXAMINATIONS, 2001**

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**THIRD-YEAR SCIENCE**

**BOTANY**

*BT306: Plant ecology and palaeoecology (Environmental Botany)*

Professor M.J. Dring  
Professor M.D. Guiry  
Professor M. O'Connell  
Dr J. Fuller

Time allowed: *Three hours.*

Answer *four* questions.

1. Give a concise account of a classificatory method for vegetation description and analysis.
2. Consider pollen profiles as complex records of past vegetation.
3. Discuss the pollen analytical evidence for human impact on the natural environment in Ireland during the Neolithic.
4. Give a detailed account of Irish blanket bog ecosystems in terms of development, vegetation and ecology. What are the differences between lowland and upland blanket bogs?
5. Describe and compare the processes of primary and secondary vegetation succession. Provide examples with your answer.
6. Discuss the rôle and importance of pH and the cation exchange complex in relation to soil fertility.
7. "Farming is a key element in the maintenance of biodiversity in Ireland". Discuss.