

G634: Applications of Biotechnology – Sample Assignment B1

Unit Name: Applications of Biotechnology	Unit Number: G634
Assignment Title: Genetically Modified Food	Assignment Number: G634 Sample Assignment B1
Date Set:	Due Date:
Assessment Objective(s): AO2(a) & AO2(c)	

Assignment Brief:

There is a large amount of information available on the advantages and disadvantages of using DNA technology in the production of food plants. It is important to appreciate that each source is likely to have a bias. Your brief is to research the topic thoroughly to understand the science involved and collect a range of views in order to complete the second task on moral and ethical issues.

Task 1:

Carry out your research using several different sources and write a report which assesses the impact of the production of genetically modified food plants on society.

Your report should include:

- an outline of the techniques used in the genetic modification of food plants
- a description of how successful recombinant DNA technology is in solving problems associated with food production
- a description of two specific examples
- a list of the benefits gained from using DNA technology
- conclusions on overall benefits
- evidence of the evaluation of the two specific examples
- clearly referenced evidence

In order to gain the higher marks check you have included:

- a comprehensive evaluation of the success of your chosen examples
- a summary of the main findings.

[Max marks possible for this task: 5]

Task 2:

This task involves your analysis of the moral and ethical case for the use of recombinant DNA technology in the production of GM plants.

You should consider the reason for its use, analyse the content, find a number of views and draw your own conclusions. The sources should be referenced. The main aim is to establish your own position, having considered the evidence and the views of others. The outcome should be a result of informed decisions, not merely a biased view.

You also need to explain with evidence the controls placed on scientists working in this field.

In order to gain the higher marks check you have:

- explained fully what you consider to be the main moral, ethical and environmental issues concerning the use of recombinant DNA technology in the production of GM plants
- explained and evaluated two types of controls placed on scientists working in this field and how effective they are.

[Max marks possible for this task: 6]

Resources:

- relevant paper and computer-based material.