



English Language for Agricultural Majors

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Syllabus

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Syllabus

Text Book
Workbook



SOHAG UNIVERSITY
FACULTY OF AGRICULTURE



English for Agriculture Majors

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Syllabus

Exam and Grades:

Midterm exam	10%
Homework	10%
Oral exam	10%
Final exam	<u>70%</u>
	<u>100%</u>



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Lecture 1&2

1 - The parts of a plant and their functions

Source: English in focus: Agriculture

I- reading and comprehension:



¹A plant is a living organism. ²It is made up of different parts, each of which has a particular purpose, or specialized function .

³If one part of the plant is not functioning properly, the whole plant will suffer. ⁴But we may cut flowers off the plant or prune the roots .⁵Such damage is only temporary and so the plant will continue to grow.



⁶The basic parts of a plant are the **root system**, which is **below the ground** , and the **shoot system above**. ⁷The root of a plant has two main functions. ⁸It **takes in**, or **absorbs**, water and minerals from the soil through the **root hairs**, which **are single cells near the tip** of each root. ⁹The other main function of the root is to **hold**, or **anchor**, the plant firmly in position in the soil.



¹⁰Plants such as **sugar beet** and **carrot** are able to store food in their roots. ¹¹In this way they can keep growing for more than one season.

¹²In addition, plants such as **clover** and **lucerne**, known as '**legumes**' have **special bacteria** which live in the roots. ¹³These **simple forms of life** take nitrogen out of the air which is in the soil



¹⁴Such **leguminous** plants are usually **ploughed under the soil**. ¹⁵By doing this the soil is made more **fertile**.

¹⁶**The shoot system** above the ground consists of the **stem**, the **leaves**, **flowers** and **fruits**. ¹⁷One of the functions of the stem is to **support** the plant. ¹⁸Another important function is to enable water and minerals to **pass up** from the roots to leaves and flowers.



¹⁹Organic materials such as sugar travel down the stem to the roots. ²⁰The leaves grow out of the side of the stem. ²¹Their main job is to make food for the plant by process known as photosynthesis. ²²For this process sunlight is necessary. ²³Water from the soil and carbon dioxide from the air are converted into sugars and other carbohydrate. ²⁴During the process oxygen is formed and released into the air.



²⁵The flower contains the reproductive organs of the plants. ²⁶The stamens produce the male sex cells, or spermatia, which are carried in the pollen grains. ²⁷The carpel produces the female sex cells or ovules. ²⁸The fruit, the ripened ovary of the flower, encloses the seeds and protects them while they are developing.



²⁹The seed it self consists of an embryo and food store. ³⁰The embryo is the part which will develop into another plant and the foodstore is ncessary to provide nourishment for the young plant while it is growing.



EXERCISE A contextual reference.

1- In sentence 5, *such damage* refers to:

- a) Cutting flowers off the plant.
- b) Pruning the roots of the plant.
- c) Both cutting the flower and pruning the roots.

2- In sentence 8, *it* refers to:

- a) The shoot system
- b) The root of the plant



3- In sentence 11, *they* refers to: (Home work)

- a) The roots of the plants
- b) Plants such as sugar beet and carrots

4- In sentence 13, these simple forms of life refers to: (homework)

- a) Special bacteria
- b) Legumes
- c) Roots



EXERCISE B *Rephrasing* .

Rewrite the following sentences replacing the words printed in *italics* with the expression from the text which have the same meaning.

EXAMPLE

The roots of plants *take in* water and minerals from the soil.

= The roots of plants *absorb* water and minerals from the soil.



- 1- *The single cells near the tip of each root* increases their surface area by extending outwards from the root.
- 2- The root *holds* the plant firmly in position in the soil
- 3- Some plants have *simple forms of life* living on their roots.
- 4- We can improve the fertility of the soil by ploughing under *plants such as clover and lucerne*.



5- Sunlight provides the energy for the process of *converting water from the soil and carbon dioxide from the air into sugar and other carbohydrates.*

(homework)

6- While growing, the seeds are protected by the *ripened ovary of the flower.* *(homework)*



II Language in use

EXERCISE B *the definition of parts of a plant.*

We can define different parts of a plant by

- a) naming them,
- b) stating the class they belong to,
- c) describing their function .

Example

(i) NAME : root hairs

CLASS: parts of a plant

FUNCTION: absorb water and minerals from the soil

DEFINITION: *The* root hairs *are the* parts of a plant *which* absorb water and minerals from the soil



- (ii) NAME : stem
CLASS: part of a plant
FUNCTION: Supports the shoot system
DEFINITION: *The stem is the* part of a plant
which Supports the shoot system

Using the information below , write out complete definitions of each part of plant as in the example above.



III Grammar

EXERCISE A *the forms of definitions.*

Definition often takes one of the following forms:

1- **A** is/are, may be defined as **B** which **C**

A The embryo *is, may be defined as* **B** the part of a flower *which* **C** will develop into another plant.

- The embryo *is* the part of a flower *which* will develop into another plant
- The embryo *may be defined as* the part of a flower *which* will develop into another plant



III Grammar

EXERCISE A *the forms of definitions.*

Definition often takes on of the following forms:

2- B which C is/are called, is/are known as A

B the part of a flower *which* C will develop into another plant is called/known as A The embryo.

A the embryo, B the part of a flower, C will development into another plant.

- The part of a flower *which* will develop into another plant is **called** The embryo.

OR

- The part of a flower *which* will develop into another plant is **known as** The embryo.



III Grammar

EXERSICE A *the forms of definitions.*

Home work:

- 1- Photosynthesis.
- 2- A soil profile.
- 3- Aerobic bacteria.
- 4- Osmosis.



II Language in use

EXERSICE C *General statement of function.*

We can make general statement about function different parts of a plant by

- a) naming them,
- b) Saying what their function is.

Example

- (i) NAME : root hairs
FUNCTION: absorb water and minerals from the soil

GENERAL STATEMENT : *The* root hair absorb water and minerals from the soil



II Language in use

EXERSICE C *General statement of function.*

Answering questions about what the plant parts do makes general statement.

Q: What do the hair root do ?

A: The root hairs absorb water and mineral from the soil

OR

Q: what is the function of the root hairs?

A: *The function* of the root hairs *is* to absorb water and minerals from the soil.



II Language in use

EXERSICE C *General statement of function.*

Answering questions about what the plant parts do makes general statement.

Homework:

Q: What do the hair root do ?

Q: what is the function of the root hairs?

1- stem 2- fruit 3- stamen 4- leaves