Practical-19

Visit to a Local Market for Identification of Vegetable Crops

Exercise 19.1: **Visiting local market to identify different vegetable crops on the basis of plant part consumed**

OBJECTIVES:

- To visit a local market to identify different vegetable crops on the basis of their economic plant parts.

Delivery Schedule: 2 periods.

Student's Expectations/ learning objectives:

- Identification of different vegetables on the basis of their economic plant part sold in the market.
- Classification of the vegetables into the appropriate category as per the plant part consumed.

Prelearning required

- Identification of pictures of economic parts of vegetables.
- Classification of vegetables on the basis of economic plant parts consumed.

Handout and material required: Paper sheet, pen to note down the instructions, pictures of different vegetables and fresh samples of vegetables.

Introduction:

All parts of herbaceous plants eaten as food by humans, whole or in part, are generally considered vegetables. Vegetables include leaves (lettuce), stems (asparagus), roots (carrots), flowers (broccoli), bulbs (onion), seeds (peas and beans) and of course the botanical fruits like cucumbers, squash, pumpkins, and capsicums. Vegetables are identified by various means based on their economic part used, colour, shape, size *etc.* In market, the vegetables can be easily identified on the basis of their economic parts which we consume as raw or cooked. Each part of a plant has certain characteristic features that can be used for identification of

different vegetables. Now a days, consumers are aware about the nutritive value of vegetables thus these days each and every vegetable is available in the market irrespective of the region in which it is grown. Therefore, it is indeed necessary for the students to plan a visit to a market to get familiar with different vegetable crops consumed as food in our daily routine.

Procedure:

Following instructions can be helpful in identification of different vegetables in the local market:

- Take the pictures of different vegetables with you while visiting vegetable market. You can identify vegetables by matching them with the photo prints.
- Try to classify the vegetables on the basis of their physical characteristics like colour (red, yellow, green, purple, orange), shape (long, round, oval), texture (smooth, rough, warty, hairy), size (large, medium, small) and type of plant part used (root, stem, leaves, flower, fruit and seeds).
- Identify the vegetables based on plant part consumed.
- Identify the vegetables on the basis of other plant parts also which are not directly consumed such as leaves of carrot, beets have red stems and green leaves.
- If you are unable to identify a vegetable, you may ask the vendor about the name of vegetable and its plant part consumed either in raw or cooked form.

Important vegetables and their economic plant parts consumed as vegetable

Name	Plant part consumed as vegetable	Photographs
Artichokes	**Flower:** The plant part which we eat is a flower. The interior choke portion is where you will find multiple anthers and pistils.	
Broccoli	**Flower:** The head of broccoli is composed of unopened flower buds and generally green coloured but also available in other colours such as purple or yellow or black.	
Cauliflower	The curd of cauliflower is composed of unopened flower buds supported by branched stems. The colour of the cauliflower is white to creamy white.	
Cabbage	**Leaves:** Round or flat round light green coloured head formed by overlapping leaves.	

Knol khol	**Stem:** Light green colored glossy knobs/tubers with few leaves on the top.	
Garden/pea	The pod is the entire fruit having seeds inside. Generally, seeds are consumed. Now, edible poded peas are also there which are consumed whole.	
Beans	**Pod/fruit:** The pod is the entire fruit bearing immature miniature seeds inside. The whole pod is consumed.	
Tomato	**Fruit:** Bright red coloured fruits, sweet and juicy may be round or oval in shape.	
Brinjal	**Fruit:** Long, round or oblong purple, green and white skinned fruits with white flesh and meaty texture.	
Capsicum	**Fruit:** Bell shaped, bright coloured (red, yellow, green, orange), glossy and non pungent fruits	
Chilli	**Fruit:** Long and slender fruits with green or red colour and are pungent	
Brussel's Sprout	**Leaves forming mini head:** Each individual sprout is composed of tightly folded leaves centred around a short stem which forms a side branch on the plant.	
Celery	**Leaf:** A celery stalk is technically a petiole not a stem. The petiole connects the stem to the leaves.	
Garlic	Each garlic clove is a group of modified leaves centered on a short stem base.	

Lettuce	**Leaf:** Lettuce leaves can be green, red or mosaic of both the colours. Leaf edges are slightly rippled which differentiate leaf lettuce from romain and head type lettuce having smooth leaf edges.	
Onion	Onions are a group of modified leaves centred on a short stem base.	
Spinach	**Leaf:** The leaves are dark green, simple, ovate to triangular-based, very variable in size. Savoy type of spinach has dark green, crinkled and curled leaves.	
Carrot	**Root:** An underground storage organ. Orange/red/purple coloured roots with green leafy top.	
Parsnip	**Root:** Parsnip is a root much like a carrot/radish.	
Radish	**Root:** White coloured roots with green leafy top. Roots with outer skin pink coloured and mixture of both white and pink or white and green *etc.*	
Sweet Potato	**Root:** Pinkish brown roots with mild aroma.	
Asparagus	**Stem:** Newly emerging shoots called as spears are consumed. They are tender green or purple or white in colour.	
Turnip	A modified stem that functions as an underground storage organ *i.e.* purple and white coloured root	
Potato	A modified stem that functions as an underground storage organ.	

Yam	A modified stem that functions as an underground storage organ.	
Pumpkin	**Fruit:** Big, round shaped fruit, green and orange in colour	
Summer squash	**Fruit:** Elongated, green and yellow coloured fruits.	
Cucumber	**Fruit:** Fruits are cylindrical dark green to light green in colour with thick rind. They may have bumpy skin with tiny white or black-dotted spines.	
Bitter gourd	**Fruit:** The fruit has a distinct warty exterior and an oblong shape. The fruit colour may vary from dark green to light green and may be even creamish in colour. The fruits are bitter in taste.	
Ridge gourd	Ridge gourd fruit is green, cylindrical with tapering ends and can be easily identified with ridges on the fruit	
Sponge gourd	**Fruit:** Fruits are similar to ridge gourd but lack ridges on the fruit	
Bottle gourd	**Fruit:** Bottle gourd is cylindrical in shape with light green colour. The outer rind is thick and glossy in appearance.	
Musk melon	**Fruit:** Musk melon fruit is round, firm, light orange with greenish tinge, may be netted with characteristic aroma. The fruit may have rough surface or smooth surface with typical ribs.	

Exercise 19.1: **Visit a local market and identify different vegetables. Record your observations with respect to various characteristics in the data sheet.**

DATA SHEET

S. No.	Colour	Shape	Size	Plant part consumed as a vegetable	Texture	Vendor's Preposition	Name of a vegetable	Remarks
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								