



**FACULTY OF AGRICULTURAL SCIENCES AND
ALLIED INDUSTRIES**

Lecture 1: Introduction and importance of organic manures

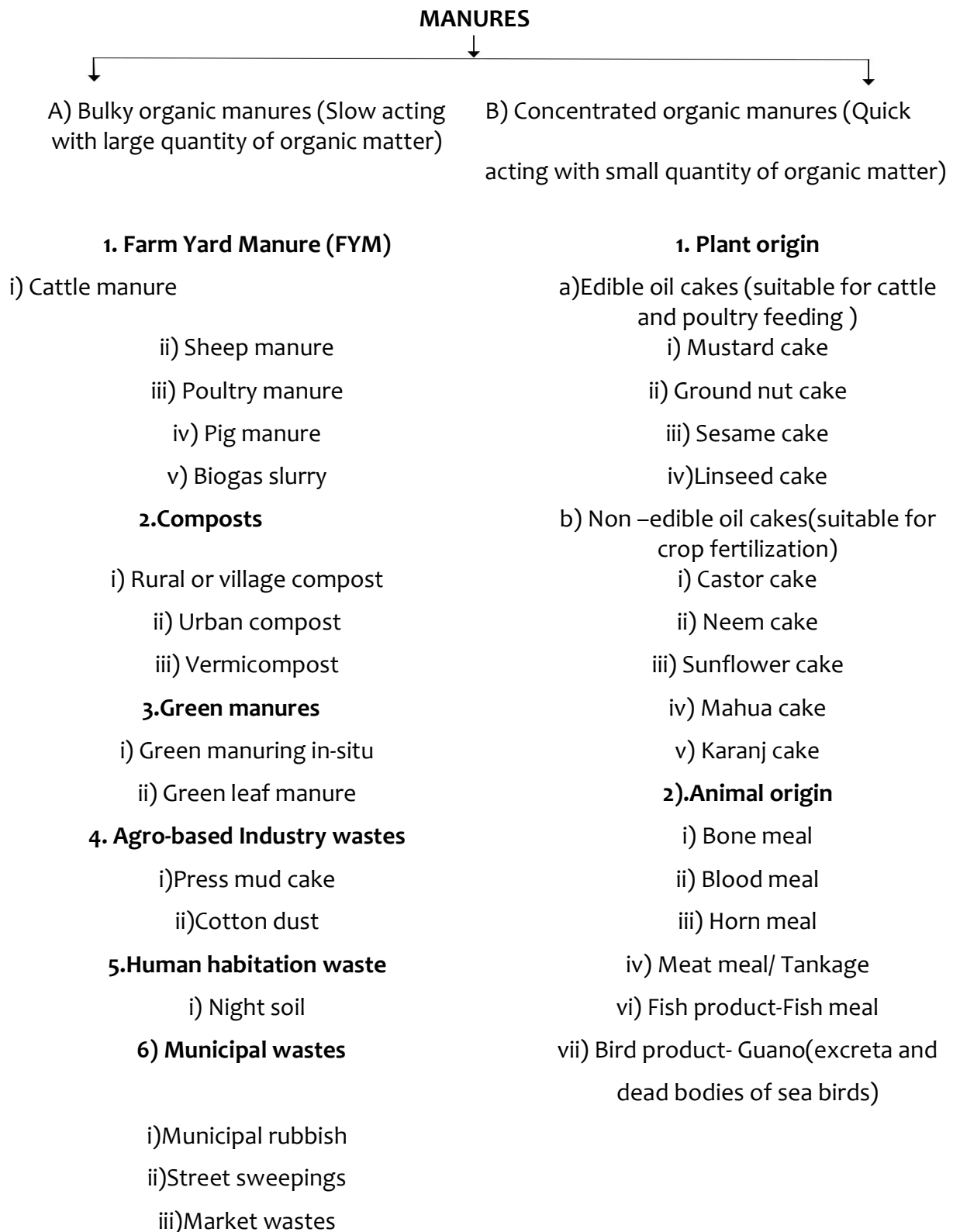
The word “Manure” is originated from the French word “MANOEUVRER” which refers to “work with soil” .The word Manure is also originate from Latin word “Manu” (hand) and operate(to work).

Differences between manures and Fertilizers:

S.No.	MANURES	FERTILIZERS
1	Organic in nature	Inorganic in nature
2	Slow acting	Quick acting
3	Having low analytical value	Having high analytical value
4	Having no definite chemical composition	Having definite chemical composition
5	Obtained from plant , animal and human resources	Mined or manufactured
6	Improves physical properties of soils	Don't improve the physical properties of soils
7	Supply almost all major, minor and micronutrients.	Supply one or very few plant nutrients.
8	Derived from French word ‘MANOEUVRER’ to work with soil	Derived from Latin word Fertil (means Fertile)
9	Bulky in nature	Non-bulky in nature

Manuring: Manuring is the process of increasing the productive capacity of land by adding plant foods to the soil in different forms.

Classification of Manures with examples



IMPORTANCE OF MANURES IN SOIL FERTILITY MANAGEMENT

A) Bulky organic manures:

Effect of organic matter on soil properties:

- Improvement of soil physical properties
- Improvement of soil structure
- Improvement of water holding capacity
- Improvement of soil aeration
- Reduction of soil loss through erosion
- Improvement of chemical properties
- Supply of essential plant nutrients in balanced ratio
- Slow release of nutrients
- High residual value
- Improvement of biological activity
- Stimulation of soil fauna and flora

B Concentrated organic manures:

Like bulky organic manures, these organic manures contain plant nutrients and considerable amount of organic matter. They have direct effect on plant growth. Nitrogen content is higher in concentrated organic manures and varied from 2.5 per cent in mahua cake to 7.9 per cent in decorticated safflower cake. In addition to nitrogen all the oil cakes contain P_2O_5 (0.8 to 2.9 %) and K_2O (1.2 to 2.2%) since they contain nitrogen in relatively large quantities ,they are usually classified as organic nitrogenous manures . By virtue of this high nitrogen content they enrich the nitrogen status of soil.

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