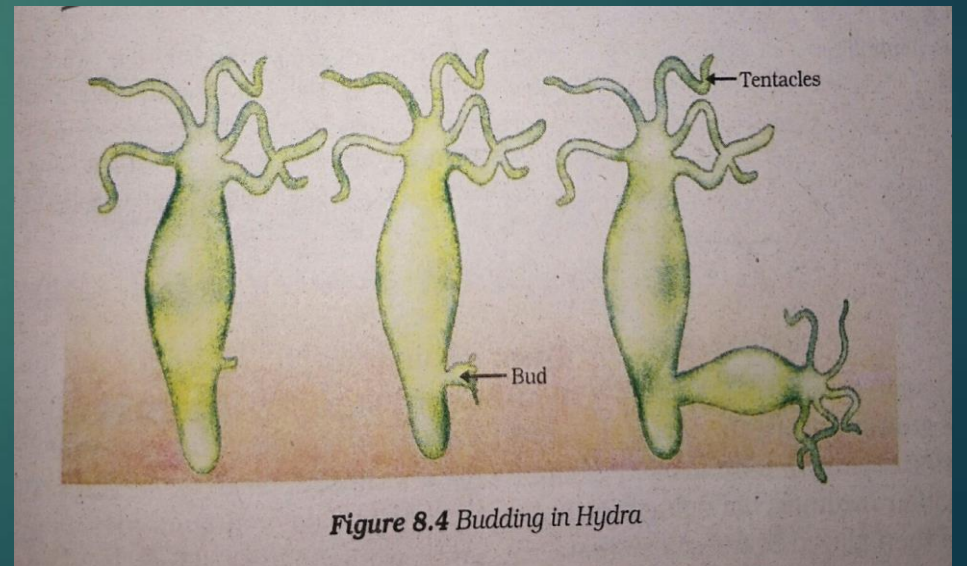
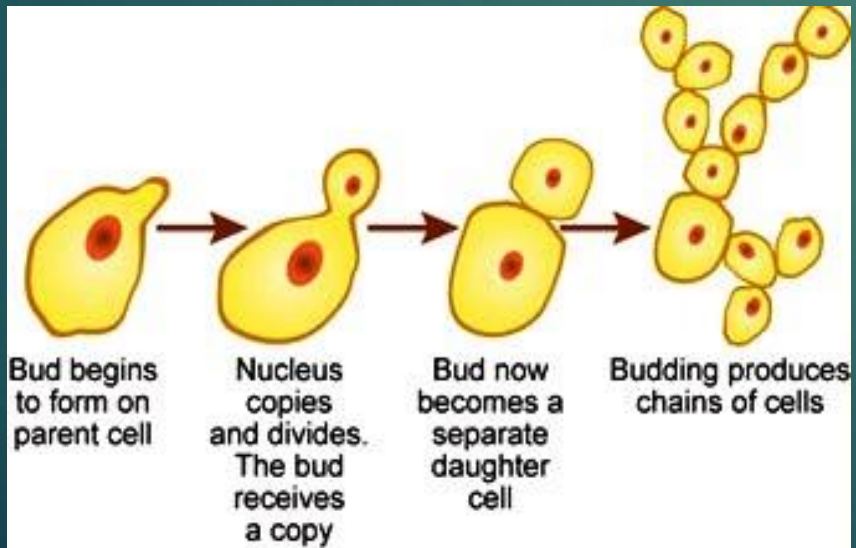


4. BUDDING

IN THIS METHOD ONE OR MORE UNICELLULAR OR MULTICELLULAR OUTGROWTHS CALLED BUDS DEVELOP ON THE PARENT BODY WHICH UPON DETACHMENT CAN FORM A COMPLETE NEW ORGANISM.

- A) BUDDING IN YEAST: A UNICELLULAR BUD IS FORMED AT SUCH A RAPID RATE THAT BUDS ARE NOT ABLE TO DETACH AND A CHAIN OF BUDS IS FORMED.
- B) BUDDING IN HYDRA- A SMALL MULTICELLULAR BUD DEVELOPS ON THE LOWER HALF OF THE BODY. THIS BUD ELONGATES AND DEVELOPS MOUTH AND TENTACLES AND FINALLY SEPARATES FROM THE PARENT BODY TO BECOME A COMPLETE NEW INDIVIDUAL.



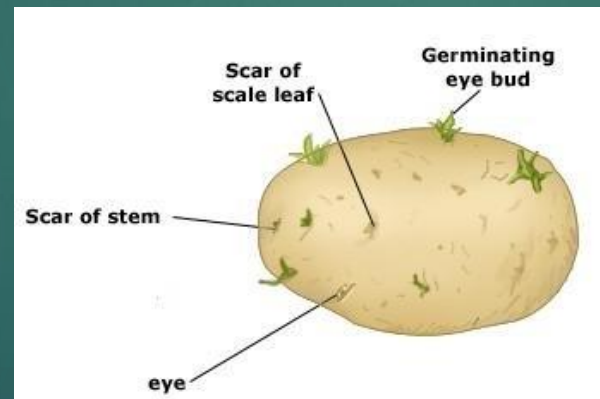
Vegetative propagation

IT IS THE PROCESS OF OBTAINING A NEW PLANT FROM VEGETATIVE PARTS OF A PLANT LIKE ROOT, STEM, LEAF.

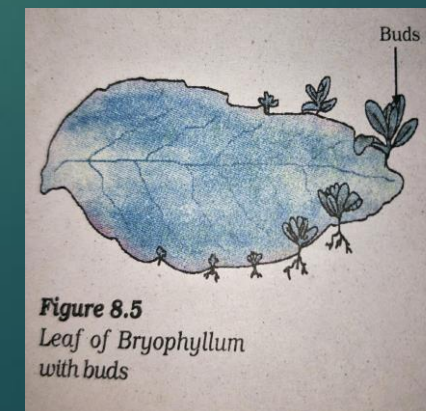
ONE EXAMPLE OF PLANTS GROWN FROM DIFFERENT PARTS ARE THROUGH ROOTS: SWEET POTATO, CARROT



THROUGH STEM: POTATO



THROUGH LEAF: BRYOPHYLLUM



VEGETATIVE PROPAGATION Contd.....

- ▶ Artificially vegetative propagation is done in plants like rose, orange, jasmine etc by cutting, grafting, layering etc.
- ▶ ADVANTAGES
 1. It is possible to propagate plants like rose, banana etc which have lost the capacity to produce viable seeds.
 2. Plants raised by this method bear flowers and fruits earlier than those produced from seed.
 3. .New plants are genetically similar to the parent plant.

Tissue culture



1. NEW PLANT IS GROWN BY REMOVING TISSUE FROM THE GROWING TIP OF THE PLANT.
2. CELLS ARE PLACED IN AN ARTIFICIAL MEDIUM WHERE THEY DIVIDE TO FORM A GROUP OF CELLS CALLED CALLUS
3. 3. CALLUS IS TRANSFERRED TO ANOTHER NUTRIENT MEDIUM CONTAINING HORMONES FOR GROTWH AND DIFFERENTIATION.
4. PLANTLETS ARE PLACED IN THE SOIL SO THAT THEY CAN GROW INTO A MATURE PLANT.

ADVANTAGE

1. MANY PLANTS CAN BE OBTAINED FROM ONE PARENT.
2. DISEASE FREE PLANTS CAN BE OBTAINED

THANK YOU

PREPARED BY

DIPALI DUBEY

TGT

AECS 3 RAWATBHATA