

Inflorescences

Inflorescences consist of clusters of flowers on a branch or system of branches. They can be simple or complex. They are simple when a flower forms on the main axis in the axil of each bract. They are complex when a partial inflorescence is born in the axil of the bract that also carries bracteoles or prophylls. Simple inflorescences include racemes, spikes, panicles, catkins, corymbs, and heads. Complex inflorescences include double racemes, double spikes, and double umbels. ●

Types of Inflorescences

Most inflorescences correspond to branching in which the axis grows in an indeterminate manner, and the flowers open in order from the base of the axis toward the apical meristem. There are also determinate inflorescences, in which the end of the axis bears the first flower, and flowers farthest from it open last.



RACEME
The flowers develop on short stalks, called pedicels, along an unbranched axis.

SPIKE
The flowers form directly from the stem instead of from pedicels.

HEAD
The flowers sit on a broad, shortened axis.

CORYMB
The pedicels are of varying lengths.



CATKIN
Similar to a hanging spike, its flowers are entirely male or female.

UMBEL
A group of pedicels spread from the end of the flower stalk.



COMPOUND RACEME
The flower stalks are branched.

SPADIX
It features a spike with a fleshy axis and dioecious flowers.



COMPOUND UMBEL
This form is more common than the simple umbel.

Sunflower

Its inflorescence is a head made of two types of flowers: peripheral florets, which are rayed and unisexual, and disk florets, which are tubular and hermaphroditic.



PERIPHERAL FLORETS

BRACTS

19 feet (6m)

IS THE MAXIMUM HEIGHT OF SUNFLOWERS. THEIR AVERAGE HEIGHT IS 10 FEET (3 M).



FLOWERS
can be fertilized only by insects.

DISK FLORETS
Tubular and hermaphroditic

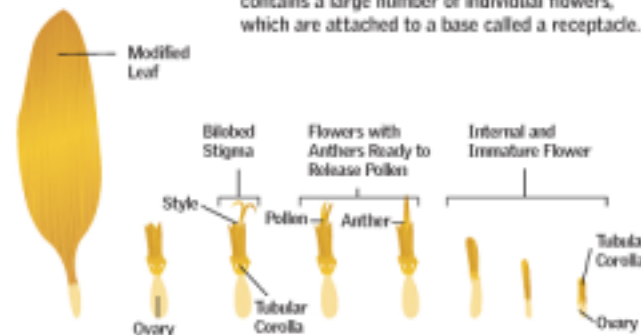
PERIPHERAL FLORETS
Rayed and unisexual

FLAT LEAVES
Broad, oval, opposed, serrated, and rough to the touch; asperous



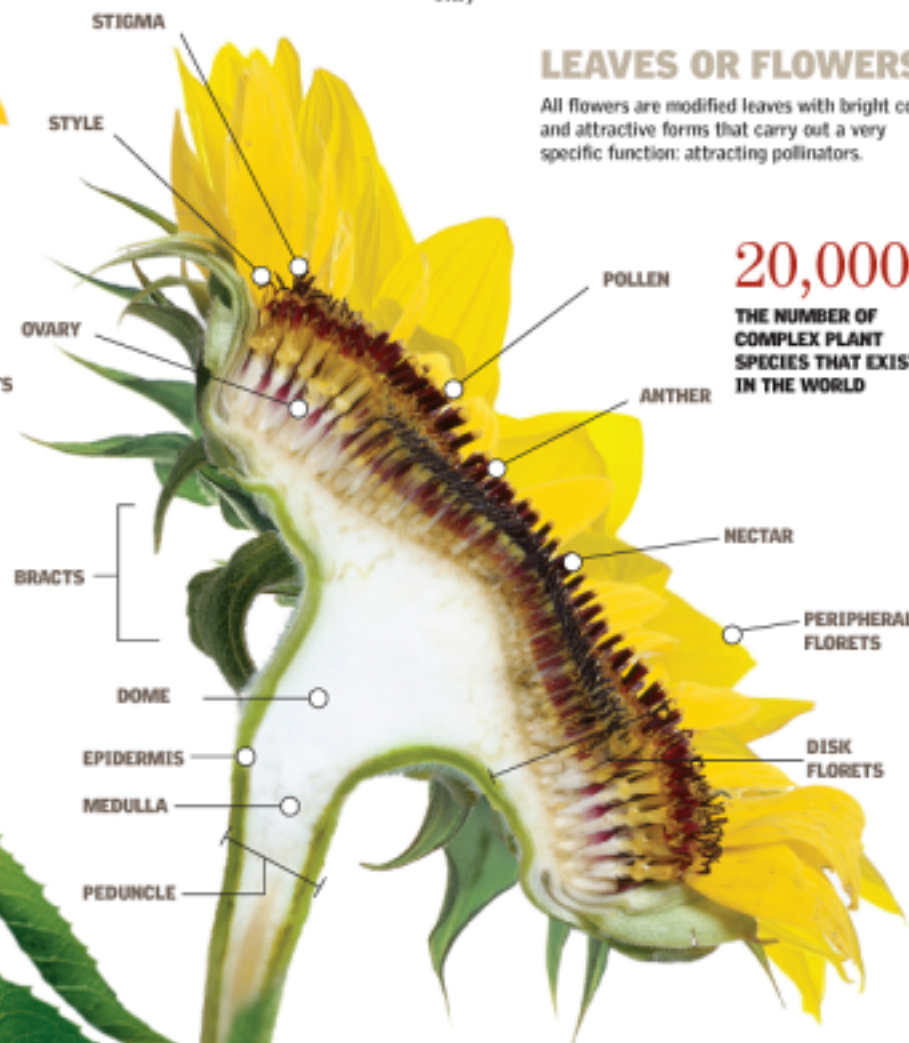
DAISY

The daisy is a composite flower. As with the sunflower, what appears to be a single flower is, in fact, an inflorescence called a head. The head contains a large number of individual flowers, which are attached to a base called a receptacle.



LEAVES OR FLOWERS?

All flowers are modified leaves with bright colors and attractive forms that carry out a very specific function: attracting pollinators.



STIGMA

STYLE

POLLEN

ANTHER

NECTAR

PERIPHERAL FLORETS

DISK FLORETS

BRACTS

DOME

EPIDERMIS

MEDULLA

PEDUNCLE

OVARY

20,000
THE NUMBER OF COMPLEX PLANT SPECIES THAT EXIST IN THE WORLD