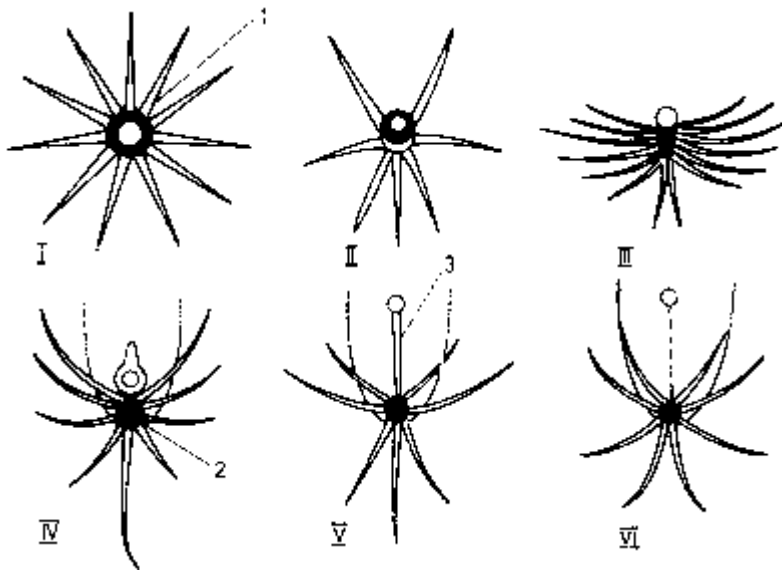


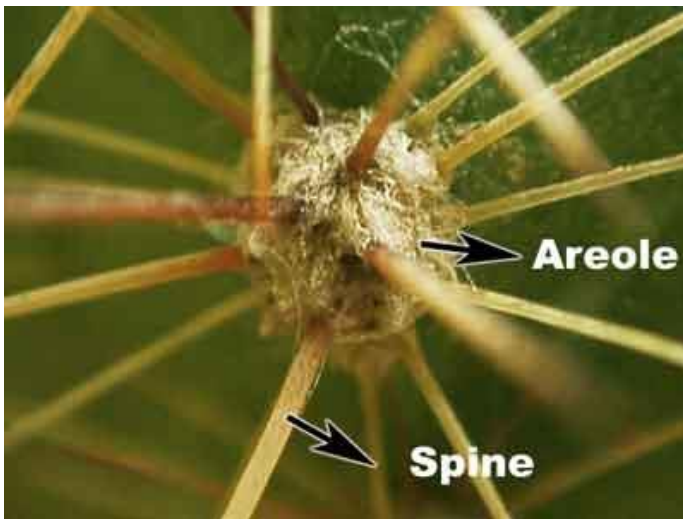
Types of **Areoles** with growth point indicated



Types of areoles (according to Buxbaum [with changes]):

- I - theoretical radial areole;
- II - two-sided ordinary areole;
- III - oblong areole with crest-like arrangement of spines;
- IV - growing point near the upper part of areole in a groove (*Hamatocactus*),
- V - growing point and areole came apart but are still connected by the groove (type *Coryphantha*)
- VI - growing point and areole came apart completely (type *Mammillaria*). 1 - growth point; 2 - a part of areole with spines; 3 - groove.

N.B. Picture and description referenced from <http://www.lapshin.org/cultivar/N26/areol-e.htm>



Left: <http://gardentia.net/cacti-other-succulents/>

Right: <https://botanycompanion.wordpress.com/lesson-8-external-plant-vegetative-structure/>



Coryphantha valida (*Coryphantha poselgeriana* var. *valida*) exhibiting separation of areole and growing point connected by groove.