

Ian Liu

Intensive Bio

Arrangement 7

Polly Lodge

Flower anatomy and dissection

The flower that I am dissecting today is orchid. It is one of my most favourite flowers because of its beauty and odor. I can never take my eyes off the bright purple color. Moreover, philosopher Confucius once said, "An orchid in a deep forest sends out its fragrance even if no one is around to appreciate it." The fragrance of orchid is delightful and refreshing.





Like every flower, the orchid has petals, the modified leaves around the reproductive part of the flower. They are in a pair and located on the right and left side of the flower.



Orchid has sepals, one dorsal sepal and two lateral sepals. They form a shape that is symmetrical and occupies the space beneath the petal. Sepals have their unique function: to protect the bud of the flower and be the support structure of the petal. The dorsal sepal is more substantial,

and it is located on the top of the flower (the first picture). Lateral sepals are smaller in size and form a pair situated at the bottom left and bottom right of the flower (the second picture).



The next structure is lip (or labellum), a part of the lower petal. This structure is more common in orchid and less common in other types of flowers. Its function is to draw insects that help in the pollination of the flower. Personally, the shape of the lip intrigues me because I can never imagine any configuration alike.



The next structure is throats, which is a pair of construction next to the lip. It is also a part of a lower petal that serves to attract pollinators because it can send out fragrance.



The next part is the pollinia. In this orchid, it looks like two small yellow disks with purple dots on it. It contains uncountable amounts of yellow pollen and is served in the pollination process.



The next image shows two structures, column and anther cap. Orchid is extremely special because its male reproductive system and female reproductive are together. The male organ, pollinium, is the two tiny yellow ball on the top. On the other hand, its female structure, stigma, is below the pollinium and is the shiny looking material inside the hole. Outside of stigma, there is a triangular structure. Anther cap is the purple portion on the top of this structure and is to cover and protect the reproductive structure.



The dissection of the flower is an exciting experience. Unusually, I only pay attention to a flower's fragrance and never take a detailed look into its structure and shape. This dissection helps me find out that orchid is symmetrical that the right hand and left side are the same. Moreover, after detailed research to learn about its reproductive structure, I realize its male and

female structure are fused, which differs from most other flowers. Lastly, there is a picture that I put small pieces together again. This new shape is spectacular.



Reference sources:

<https://www.landscape-and-garden.com/Orchids/BiologicalStructure>

<http://www.microscopy-uk.org.uk/mag/indexmag.html?http://www.microscopy-uk.org.uk/mag/artnov07/bj-orchid.html>