

The Proper Method – Taking Horizontal and Vertical Measurements  
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Recently, several of our Judging Centers have raised questions about the proper method to use in determining the horizontal and vertical measurements required for awarded flowers.

The 11th Edition of our *Handbook on Judging and Exhibition* does not provide any guidance other than that found in paragraph 7.5.1 (page 60):

“The overall measurement of a flower (sometimes called ‘the natural spread’) is that measurement of the natural carriage of the flower in its maximum dimensions without flattening or grooming. It is recorded in the horizontal direction. The vertical dimension, if significant, must also be recorded and specified as vertical.”

The two key words are vertical and horizontal. By *Webster’s Dictionary*, horizontal is defined as: “Parallel to the horizon; on a level.” Vertical is defined as: “Perpendicular to the plane of the horizon; upright; plumb.”

Now that we have the terms defined, let’s look at some examples of how to properly take these measurements.

Figure 1 illustrates a typical cattleya flower. As you can see, the horizontal has been measured from the tips of the petals in a line parallel to the horizon. The reason we chose the petals is that they represent the maximum dimension in the horizontal plane. The vertical has been drawn from the tip of the dorsal sepal to the extreme tip of the lip on the perpendicular, again because these represent the maximum dimensions in the vertical.

In our next example, we will use different parts of the flower to determine the horizontal and vertical measurements.

In Figure 2, we have a rather typical standard cymbidium, where the maximum horizontal dimension is the distance between the tips of the lateral sepals in a line parallel to the horizon. The maximum vertical also uses the tip of the dorsal sepal as the upper measurement and is taken on the perpendicular to the midpoint of that line joining the tips of the lateral sepals. This measurement technique is also often used for masdevallias and draculas.

In our last example, we examine a generic dendrobium flower. The distance between the tips of the petals is our horizontal maximum dimension, and the midpoint of an imaginary line joining them is our uppermost dimension of the vertical measurement. The distance from that midpoint to the tip of the lip on the perpendicular is the vertical measurement.

We have not yet discussed things like multifloral paphiopedilums. As many of these have long petals that are arched, angled or straight out from the flower, the horizontal

measurement should be taken at the widest point on the horizontal plane similar to that of Figure 1. The vertical measurement will usually be taken from the tip of the dorsal sepal to an imaginary horizontal line drawn between the tips of the petals as in Figure 3.

At no time are horizontal or vertical floral measurements taken on the diagonal.