

PLANT HEALTH

INCREASED YIELD

Plant stomata are small openings located on the bottom of every leaf

When airflow is at the ideal speed of 100-150 FPM the stomata will remain open and absorb CO₂

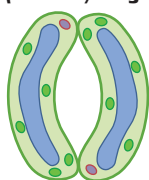
Increasing yield by up to 30%



Correct wind speed paired with ideal temperature and humidity gives the plant signals to open the guard cells of the stomata located on the bottom of each leaf. This allows the CO₂ in the air to enter the stoma, supporting plant growth and overall health. If these conditions are not ideal, stomata will remain closed, resulting in plant stress and possible death. Ideal conditions reduce instances of product loss, increasing yield by up to 30%.

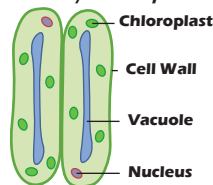
Plant Stomata

Guard Cells (Swollen/Turgid)

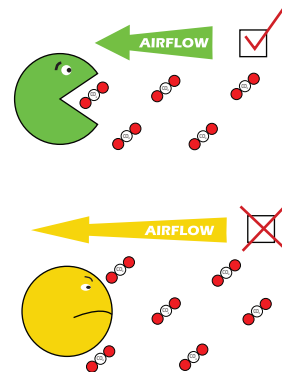


Stoma Open
Day Time
With Ideal Conditions:
Temperature, Humidity
& Airflow

Guard Cells (Shrunken/Flaccid)



Stoma Closed
Night Time
OR Improper Conditions

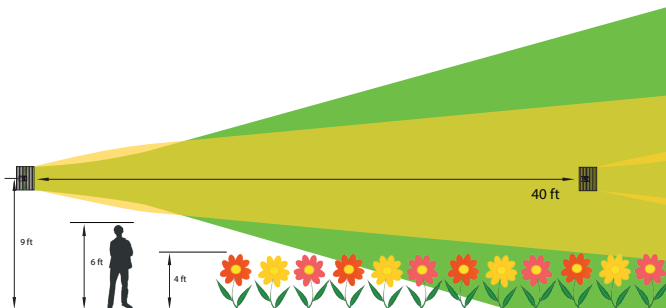


SMART AIRFLOW

Optimum growing conditions are 100 Feet Per Minute. John Bartok Jr.

Snap-Fans provide 221% greater air volume moving at 100 FPM or higher at a distance of 40 ft compared to leading competitor

Consuming 30% less energy



According to industry leading agronomist, wind speed of 50-100 feet per minute is ideal for greenhouse circulation. The correct amount of air flow throughout the plant canopy will create uniform temperature while removing excess heat, reduce condensation and decrease instances of foliar disease. Air speeds over 200 FPM are detrimental to plant health, can cause cellular damage, plant stress and require additional watering due to evaporation.

Cone of Air Movement

- Snap-Fan's EC20 MAX
- Competitors Fan

Test conducted using hand held anemometers for informational purposes at BESS laboratories

End Elevation at 35 ft from fan

