

Manage your Vineyard + plant + soil health with the Trak365 API



Vine-Works

TRAK365
PUTTING YOU IN CONTROL

vidacycle

GDD – Growing Degree Days

GDD's are a method of measuring the plants growth and maturation progress across your specified season. The collection and recording of average daily temperatures within a specific season (usual spring/ summer) is calculated as GDD. This includes a minimum 'development' threshold and can't be exceeded for growth to happen. The concept is that growth and development increase with air temperature but slows down or is harmed by extreme/ maximum temperature.

Although not the most perfect method, they are a more reliable way of predicting crop development than using calendar days.

How is this calculated?

Daily GDD = (High + Low) / 2 - T base (t= temperature)

Where T base is set to 10°C. Temps. above 30°C are trimmed down to 30°C (high temps. do not account for plant development). Days that have negative GDD are recorded as 0

The Collection and summation of Growing Degree Days can be used for others Agri – relevant purposes:

- Seasonal/ regional comparisons
- Predicting suitability of region for vine/ soft fruit development (bloom, maturity, veraison [in grapes]).
- Optimising yield predictions
- Prediction for the best time to fertilizer or pest mitigations

Working and together with subject matter experts Trak365 have built an API.

Gathering the data from your WeatherWatch solution through your Trak365 Cloud Platform, the VidaCycle app translates this data to give you GDD alongside your phenological dates.