The grape veraison is a period of rapid change of internal biomaterial, which is closely related to fruit quality change. Therefore, management of grape tree before and after the veraison period is very important for improving the fruit quality, so it is necessary to predict the veraison. We investigated the veraison of 'Kyoho' grape cultivated at a temperature gradient of 2.5°C to 6.0°C higher than the atmospheric condition and developed a prediction model of veraison according to temperature after full bloom. The veraison of 'Kyoho' grape was accelerated with higher temperature during the whole growing period, and it was accelerated about 5.1 days when temperature rose by 1°C. However, after the bloom, the veraison accelerated by about 2.2 days per 1°C increase. As a result of integrating the temperature from full bloom to veraison in various temperature factors, the coefficient of variation of the accumulated daily mean temperature was the lowest and the mean of integrated daily mean temperature (base temperature: 10°C) was 681.7°C. Root mean square error (RMSE) of the veraison predicted by applying the integrated daily mean temperature of 681.7°C was 1.3. I think that it is possible to predict the veraison of 'Kyoho' grape by using the predicted air temperature after full bloom.

T. 053-238-6720, najuflower@korea.kr