

Linalool is an important compound that contributes to the floral aroma in wines. This study showed the effect of light exposure on linalool accumulation in berries. The grape bunches were covered with films that block the full light spectrum (Shade) and the UV spectrum (UV-block), and a transparent film (Control). The linalool content was significantly higher in juice from Control-covered berries than in juice from Shade- and UV-block-covered berries, and the expression levels of the representative genes in linalool biosynthesis in Shade- and UV-block-covered berries were markedly lower than in Control-covered berries. These findings suggest that exposing berries to light is essential for linalool biosynthesis. To reflect sunlight onto grape clusters, reflective sheets were placed on the ground of a vineyard. The linalool content in berries exposed to sunlight reflected from the reflective sheets was higher than those in the control.

Effect of reflective sheets on linalool accumulation. (A) The grapes of Riesling (*Vitis vinifera* L.), (B) Linalool contents in grapes.

