SUPPLEMENTARY DATA

Defoliation experiment
Neustadt an der Weinstraße (NW), Geisenheim (GM), Remich (RM)

Defoliation approaches
- No defoliation (ND)
- Early defoliation (ED; BBCH stages 69-71; Lorenz *et al.*, 1995)
- Late defoliation (LD; BBCH stages 77-79; Lorenz *et al.*, 1995)

Sunscreen experiment
Neustadt an der Weinstraße (NW)

Defoliation approaches
- No defoliation (ND)
- Early defoliation (ED; BBCH stages 69-71; Lorenz *et al.*, 1995)
- Late defoliation (LD; BBCH stages 77-79; Lorenz *et al.*, 1995)

Application measures
- Early defoliation (ED) + kaolin (5 % CutiSan®)
- Early defoliation (ED) + lime (2 % fiMUM®-Fruchtkalk®)
- Late defoliation (LD) + kaolin (5 % CutiSan®)
- Late defoliation (LD) + lime (2 % fiMUM®-Fruchtkalk®)

Protective net experiment
Neustadt an der Weinstraße (NW)

Defoliation approaches
- No defoliation (ND)
- Late defoliation (LD; BBCH stages 77-79; Lorenz *et al.*, 1995)

Shading measures
- Late defoliation (LD) + hail net (AG RG 26/3)
- Late defoliation (LD) + shading net (GI RO 080)
- Late defoliation (LD) + *Drosophila suzukii* net (GI RO 101)

Figure S1. Overview of the viticultural measures conducted within the respective experiments at the sites across the growing seasons 2021 and 2022.

SUPPLEMENTARY DATA
Waber, J., Heilemann, K. K., Heilemann, K., Schultz, M., Simon, C., Buchholz, G., … Bogs, J. (2025). Minimising sunburn necrosis on *Vitis vinifera* L. 'Riesling' grapes by defoliation, photo- and thermal protection. *OENO One*, *59*(3).
https://doi.org/10.20870/oeno-one.2025.59.3.9357

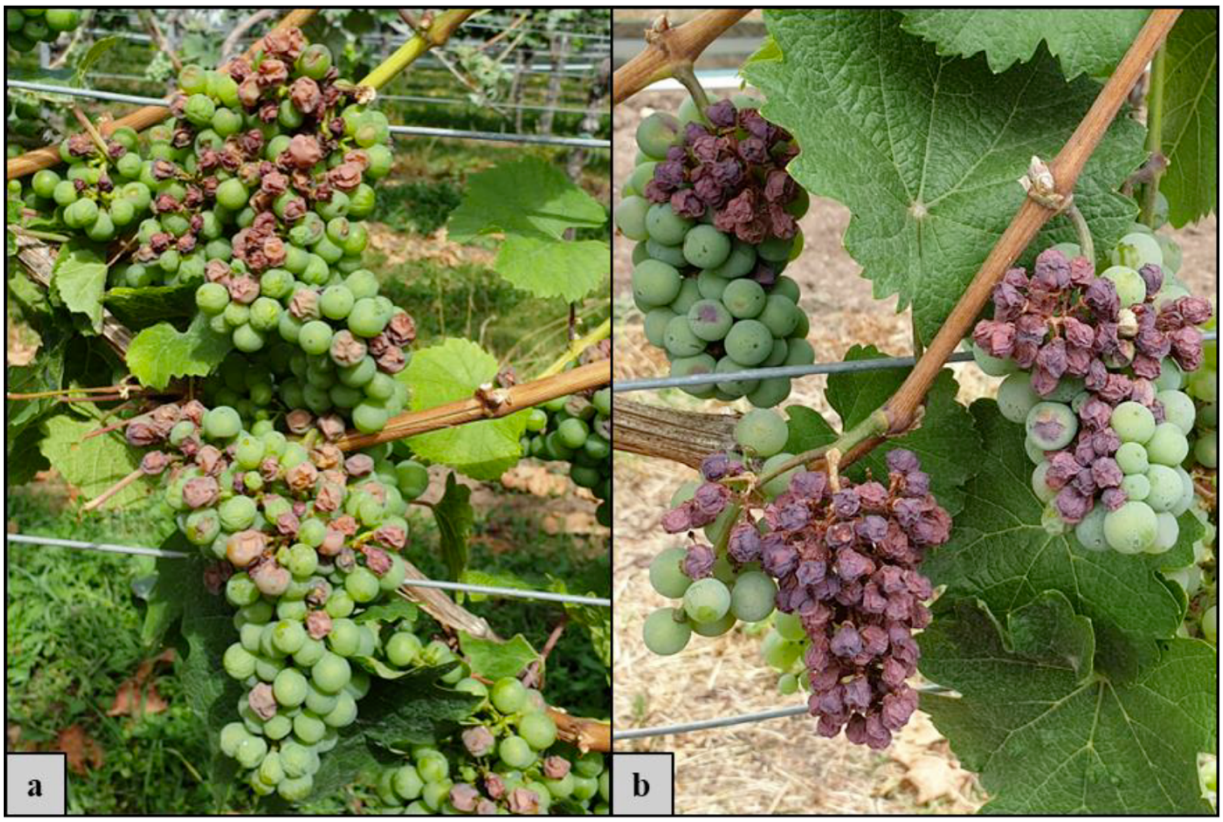


Figure S2. Sunburn necrosis observed in the growing seasons 2021 (a) and 2022 (b) at the site Neustadt an der Weinstraße (NW).

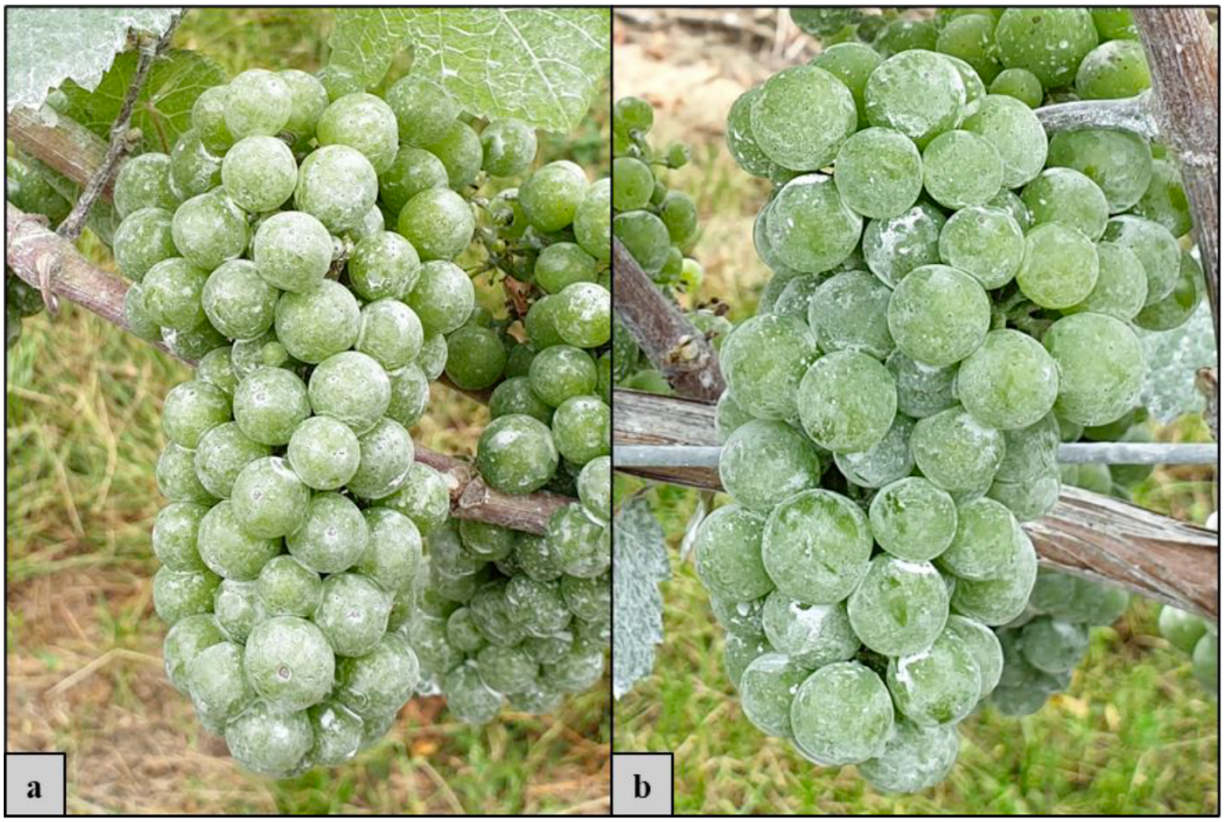


Figure S3. Grape coverage by kaolin (5 % CutiSan®; a) and lime (2 % fiMUM®-Fruchtkalk®; b) at the site Neustadt an der Weinstraße (NW).

Waber, J., Heilemann, K. K., Heilemann, K., Schultz, M., Simon, C., Buchholz, G., … Bogs, J. (2025). Minimising sunburn necrosis on *Vitis vinifera* L. 'Riesling' grapes by defoliation, photo- and thermal protection. *OENO One*, *59*(3). https://doi.org/10.20870/oeno-one.2025.59.3.9357



Figure S4. Shading of defoliated vines by the hail net (AG RG 26/3; a), the shading net (GI RO 080; b) and the *Drosophila suzukii* net (GI RO 101; c) at the site Neustadt an der Weinstraße (NW).