

Orchard applications of sodium hydrosulfide increase the yield of avocado (*Persea americana* Mill.) cv. 'Hass'

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Supplementary Data

- **Figures S1–S5** (within current file).
- **Table S1** (Excel spreadsheet). The table provides: the raw individual tree yield data (kg and number of fruit), and the calculated average fruit weight for each of the harvests during the three study years; the cumulative yield data; and the alternate bearing index (*ABI*). Statistical analyses of the data, comparing control and NaHS-treated tree groups, are provided below the data.

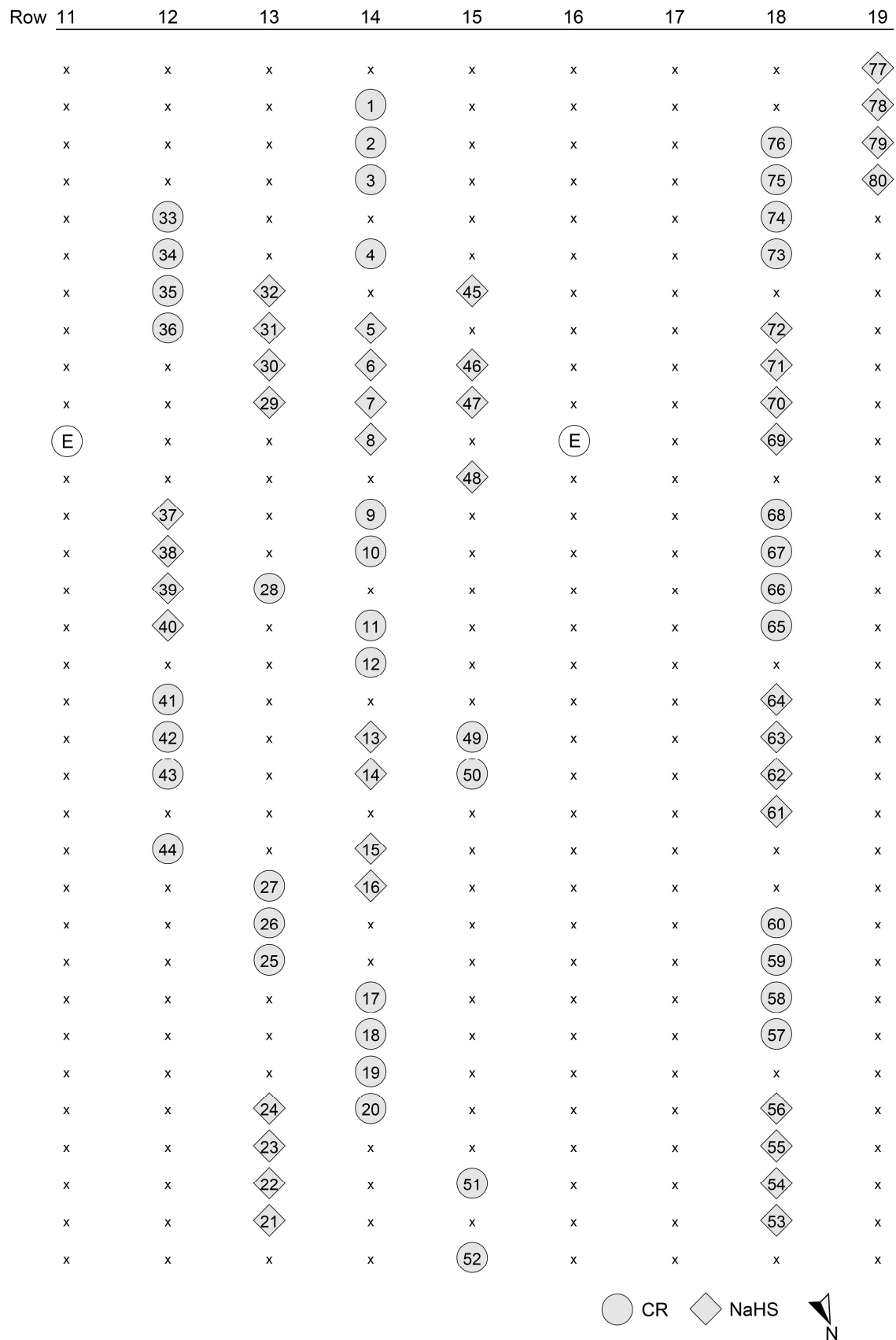


Figure S1. Orchard experiment layout. Schematic map of the experimental site at Giv'at Brenner (31°51'44.4"N, 34°47'04.3"E), in a 'Hass' plot (2017 plantation; 7-m row spacing and 4-m tree spacing). Row numbers relative to the whole plot are noted at the top. Every fifth row in the plot is cv. 'Ettinger', which serves as the pollinator tree ('E'; rows 11 and 16). Forty control (CR) and forty

NaHS-treated trees, selected as similar sized trees, are arranged in 10 ‘blocks’ of 4 trees (skipping poor/unhealthy trees or positions where trees did not survive in earlier years). Each tree has a unique number ID. The map is not drawn to scale.



Figure S2. Assessment scale for flowering intensity and foliage cover. Representative photographs of ‘Hass’ avocado trees demonstrating the visual scoring system used in the study. The assigned scores for flowering intensity (‘F’; scale of 0–5) and leaf cover (‘L’; scale of 0–3) are indicated at the bottom of each photograph.

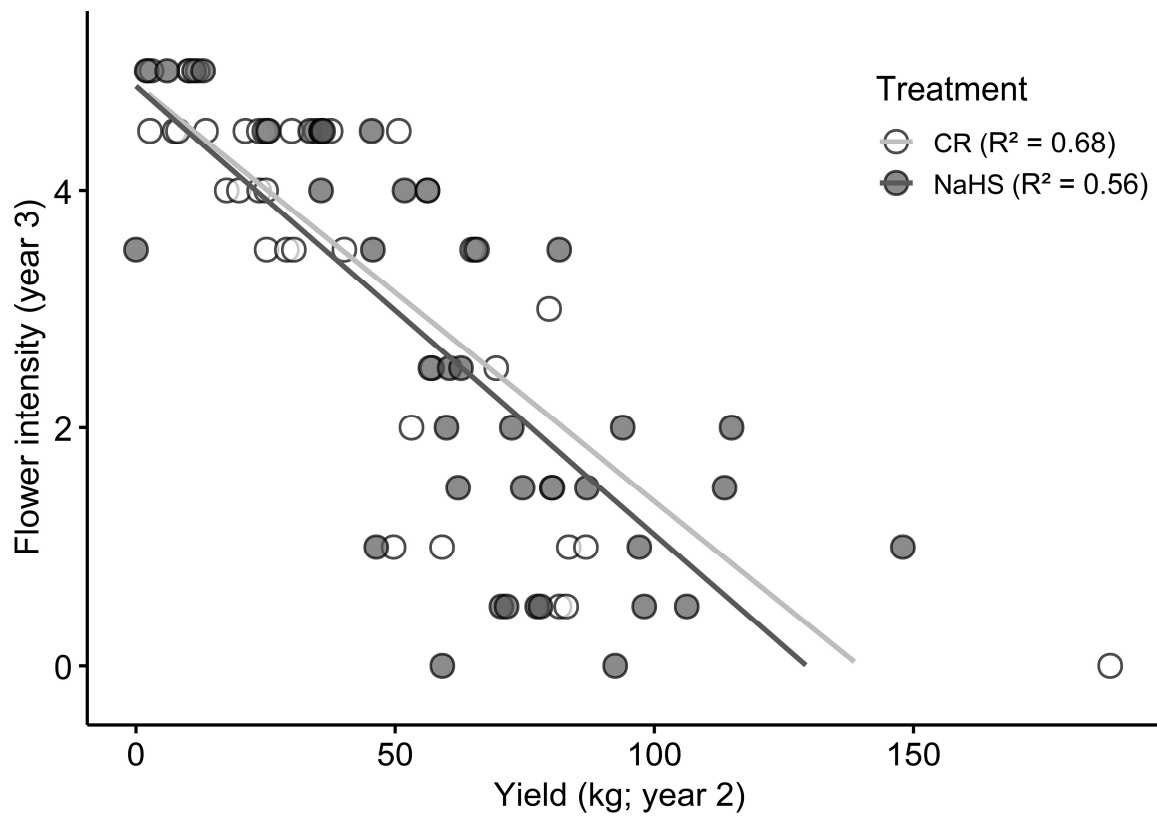


Figure S4. Linear regression between year-2 fruit yield and year-3 flowering intensity. Tree flowering intensity in year 3 (visually scored, see Figure S2 and Table 2) is plotted against the fruit yield (kg) of the previous year (year 2). Open circles represent individual trees from the control (CR) group, and solid circles represent NaHS-treated trees ($n = 40$ trees per group). Solid lines indicate the linear regression trends for each treatment, with the corresponding coefficients of determination (R^2) values displayed in the legend.

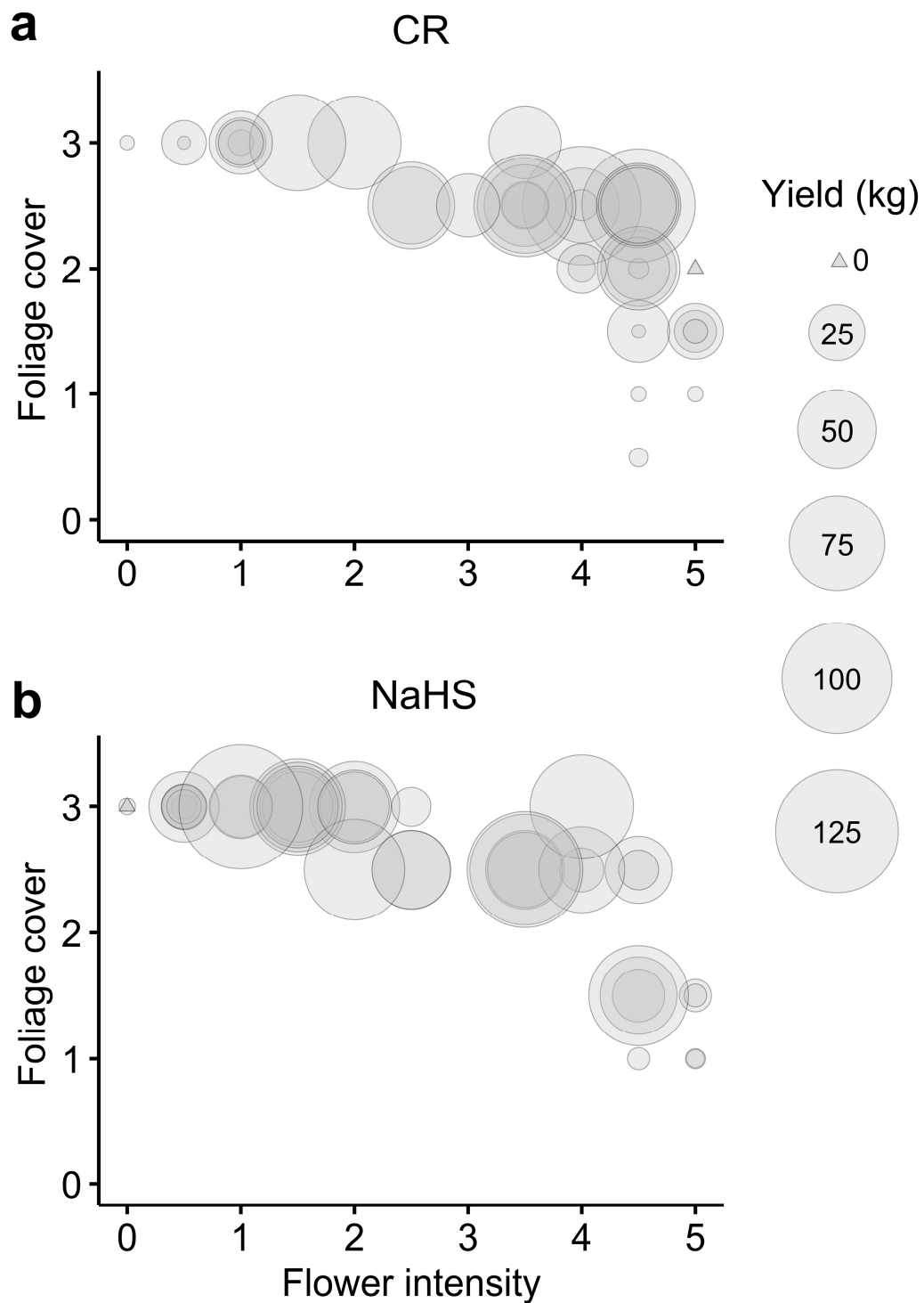


Figure S5. Relationship between tree flowering intensity, foliage cover and fruit yield in year 3. Data are plotted separately for the **(a)** control (CR) and **(b)** NaHS-treated groups (n = 40 trees per group). Fruit yield (kg) is proportional to the bubble area, as shown in the right-hand legend key. Trees with zero yield are indicated by a triangle.