| Site | . Year | April |    |   | May |    |    |    |    | June |    |    |    |    |    |
|------|--------|-------|----|---|-----|----|----|----|----|------|----|----|----|----|----|
|      |        | 25    | 30 | 5 | 10  | 15 | 20 | 25 | 30 | 5    | 10 | 15 | 20 | 25 | 30 |
| А    | 2013   |       |    |   |     |    |    |    |    |      |    |    |    |    |    |
|      | 2014   | ]     | [  |   |     |    |    |    |    |      |    |    |    |    |    |
|      | 2015   |       |    |   |     |    |    |    |    |      |    |    |    |    |    |
| В    | 2013   |       |    |   |     |    |    |    |    |      |    |    |    |    |    |
|      | 2014   |       |    |   |     |    |    |    |    |      |    |    |    |    |    |
|      | 2015   |       |    |   |     |    |    |    |    |      |    |    |    |    |    |
| С    | 2013   | 1     |    |   |     |    |    |    |    |      |    |    |    |    |    |
|      | 2014   |       |    |   |     |    |    |    |    |      |    |    |    |    |    |
|      | 2015   |       |    |   |     |    |    |    |    |      |    |    |    |    |    |

**Figure S1**. Flowering periods in the three years (2013, 2014 and 2015) in the three olive groves sites (site A, site B and site C).

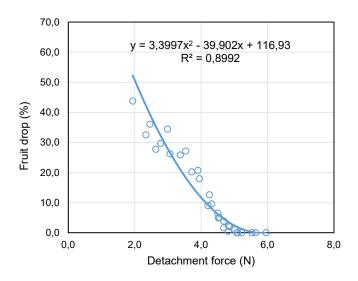


Figure S2. Relationship between detachment force and fruit drop.

**Table S1.** Multivariate analysis of qualitative characteristics of oil olive extracted from drupes produced from olive trees grown in three different sites.

| Variables       | Total<br>acidity | Total<br>waxes | Total polyphenols | Total<br>tocopherols | SFA | C18:1/C18:2 |
|-----------------|------------------|----------------|-------------------|----------------------|-----|-------------|
| Altitude        |                  |                | **                | *                    | *   |             |
| Harvesting time | *                | *              | **                |                      |     | *           |

<sup>\*\*</sup> Significance for p < 0.01; \* Significance for p < 0.05