

**Table S1.** Three-way ANOVA of dry matter (DM), leaf fresh weight per plant (LFW), leaf daily growth (LDG), yield per square meter, SPAD,  $L^*$ ,  $a^*$  and  $b^*$  as affected by hydroponic nutrient solutions (HNS), mint species and harvest time.

| Source of variation | DM  | LFW | Yield | LDG | $L^*$ | $a^*$ | $b^*$ |
|---------------------|-----|-----|-------|-----|-------|-------|-------|
| HNS                 | *   | *** | ***   | *** | ***   | ***   | ***   |
| Species (S)         | *** | *** | ***   | *** | ***   | ***   | ***   |
| Time (T)            | *** | *** | ***   | *** | ***   | ***   | ***   |
| HNS×T               | NS  | *   | *     | *   | ***   | NS    | ***   |
| S×T                 | **  | *** | ***   | *** | ***   | ***   | ***   |
| HNS×S               | NS  | *   | *     | NS  | *     | NS    | NS    |
| HNS×S×T             | NS  | NS  | NS    | NS  | *     | NS    | ***   |

Asterisks indicate significant differences at \*  $P \leq 0.05$ ; \*\*  $P \leq 0.01$ ; \*\*\*  $P \leq 0.001$ ; NS, non-significant.

**Table S2.** Three-way ANOVA of counts (CFU  $g^{-1}$ ) of different groups of microorganisms and nutrient content as affected by hydroponic nutrient solutions (HNS), mint species and harvest time.

| Source of variation on | TBC | MC | TYC | $NO_3^-$ | $CaCO_3$ | $PO_4^{3-}$ | BP  | So-Q | WL  | $CO_2$ | $O_2$ |
|------------------------|-----|----|-----|----------|----------|-------------|-----|------|-----|--------|-------|
| HNS                    | NS  | NS | NS  | *        | ***      | ***         | *** | NS   | NS  | *      | NS    |
| Species (S)            | **  | NS | NS  | ***      | ***      | ***         | *** | NS   | *** | ***    | NS    |
| Harvest time (T)       | *** | *  | *   | ***      | ***      | ***         | *** | ***  | *** | ***    | ***   |
| HNS×T                  | NS  | NS | *** | **       | *        | *           | NS  | ***  | *   | NS     | NS    |
| S×T                    | *   | *  | *** | *        | ***      | ***         | *** | ***  | **  | ***    | *     |
| HNS×S                  | NS  | NS | *   | NS       | NS       | NS          | NS  | NS   | NS  | NS     | NS    |
| HNS×S×T                | NS  | NS | *   | NS       | NS       | NS          | NS  | NS   | *** | NS     | NS    |

Asterisks indicate significant differences at \*  $P \leq 0.05$ ; \*\*  $P \leq 0.01$ ; \*\*\*  $P \leq 0.001$ ; NS, non-significant. (TBC: total bacterial count, MC: mould count, TYC: total yeast count, BP: browning potential, So-Q: soluble o-quinone and WL (weight loss)).