**Table S1:** The effects of different concentration of apyrase on the level of extracellular ATP of the wounded and systemic leaves of the wound plants.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | Application to the wounded leaves | | | |  |
| **apyrase (units/mL)** | 1 | | 5 | 10 | 20 |  |
|  | ns | | ns | 67.7%\* | 52.9%\* | Local leaves |
| ns | | ns | ns | ns | Systemic leaves |

The leaves were pre-treated with different concentration of apyrase as described in Materials and methods, and the level of extracellular ATP was measured at 0.5 h after wounding. The values of extracellular ATP in either the wounded or systemic leaves in the absence of apyrase was denoted as the 100% value. One leaf each obtained from different seedlings were used for one independent repeat of the experiment. Each value represents the mean of four independent experiments. ns- no significant effect. \*–statistically significant difference from the treatment of apyrase ( *P* <0.05).

**Table S2**: The effects of different concentration of either DMTU or DPI on H2O2 content of the wounded and systemic leaves of the wound plants.

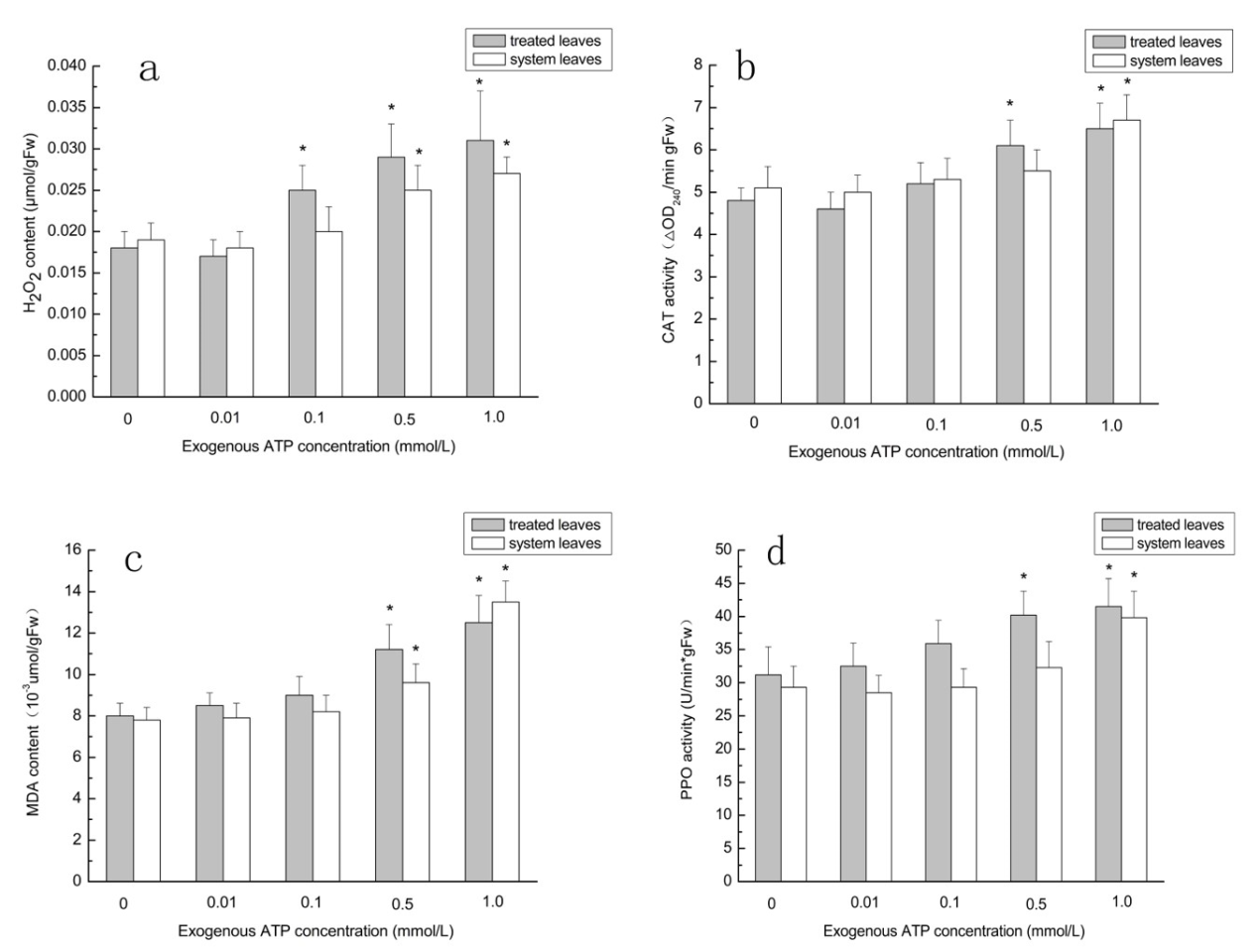
|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Application to the wounded leaves  ----------------------------------------------------- ---  ----------------------------------- | | | | Application to leaf petiole of the wounded leaves  ----------------------------------------------------------------  -----------------------------------------------  ----------------------------------------------- | | | |  |
| **DMTU**(mmol/L) | 0.1 | 0.5 | 1 | 5 | 0.1 | 0.5 | 1 | 5 |  |
|  | ns | ns | 71.1%\* | 57.9%\* | ns | ns | ns | ns | Local leaves |
| ns | ns | 74.3%\* | 54.3%\* | ns | ns | 65.7%\* | 51.4%\* | Systemic leaves |
| **DPI**(μmol/L) | 1 | 5 | 50 | 100 | 1 | 5 | 50 | 100 |  |
|  | ns | ns | 76.2%\* | 61.9%\* | ns | ns | ns | ns | Local leaves |
| ns | ns | 81.6%\* | 65.8%\* | ns | ns | 57.9%\* | 50.0%\* | Systemic leaves |

The values of the H2O2 content in either the wounded or systemic leaves in the absence of DMTU and DPI was denoted as the 100% value. Two to 3 leaves each obtained from different seedlings were pooled as one sample for one independent repeat of the experiment. Each value represents the mean of four independent experiments. ns- no significant effect. \*–statistically significant difference from the treatment of either DMTU or DPI ( *P* <0.05).

**Table S3**: The effects of different concentration of either DMTU or DPI on H2O2 content of the ATP-treated and systemic leaves of the ATP-treated plants.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Application to the ATP-treated leaves  --------------------------------------------------- ---  ----------------------------------- | | | | Application to leaf petiole of the  ATP-treated leaves  ----------------------------------------------------------------  **-----------------------------------------------**  **-----------------------------------------------** | | | |  |
| **DMTU**(mmol/L) | 0.1 | 0.5 | 1 | 5 | 0.1 | 0.5 | 1 | 5 |  |
|  | ns | ns | 77.4%\* | 67.7%\* | ns | ns | ns | ns | Local leaves |
| ns | ns | 82.1%\* | 71.4%\* | ns | ns | 75.0%\* | 64.3%\* | Systemic leaves |
| **DPI**(μmol/L) | 1 | 5 | 50 | 100 | 1 | 5 | 50 | 100 |  |
|  | ns | ns | 73.5%\* | 61.8%\* | ns | ns | ns | ns | Local leaves |
| ns | ns | 70.4%\* | 59.3%\* | ns | ns | 66.7%\* | 55.6%\* | Systemic leaves |

The values of the H2O2 content in either the ATP-treated or systemic leaves in the absence of DMTU and DPI was denoted as the 100% value. Each value represents the mean of four independent experiments. ns- no significant effect. \*–statistically significant difference from the treatment of either DMTU or DPI ( *P* <0.05).



**Fig S1.** The effects of the treatment with different concentration of exogenous ATP on the H2O2 content(a), CAT activity(b), MDA content(c), and PPO activity(d) of the ATP-treated leaves and systemic leaves.

The H2O2 content, CAT activity, MDA content, and PPO activity were measured, respectively, at 0.5 h, 1 h, 2 h, 1 h after the exogenous ATP treatment. Two to 3 leaves each obtained from different seedlings were pooled as one sample for one independent repeat of the experiment. The values represent means of at least four individual experiments. \* - statistically significant differences between the controls (0 mM ATP) and the ATP-treated plants (*P* < 0.05).