

Supplementary Material

The role of water content in the casing layer for mushroom crop production and the occurrence of fungal diseases

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Table S1. Physical, chemical, and biological characteristics of composts used in the trials.

| Parameters | Trial A | Trial L-1 | Trial L-2 | Trial C-1 | Trial C-2 |
|---------------------------|---------|-----------|-----------|-----------|-----------|
| Moisture (%) | 63.2 | 62.8 | 63.5 | 65.9 | 63.3 |
| pH (1:5, p/v) | 6.57 | 6.64 | 6.52 | 6.26 | 6.49 |
| Nitrogen (% s.m.s.) | 2.51 | 2.23 | 2.33 | 2.27 | 2.50 |
| Ash (% s.m.s.) | 28.06 | 23.89 | 24.45 | 27.61 | 27.85 |
| Organic matter (% s.m.s.) | 71.94 | 76.11 | 75.55 | 72.39 | 72.15 |
| C/N | 16.6 | 19.8 | 18.8 | 18.5 | 16.7 |
| Mites | Absence | Absence | Absence | Absence | Absence |
| Nematodes | Absence | Absence | Absence | Absence | Absence |
| Competitor molds | Absence | Absence | Absence | Absence | Absence |

Table S2. Physical, chemical, and biological characteristics of casing materials used in the trials.

| Parameters | Trial A | Trials L-1 and L-2 | Trial C-1 | Trial C-2 |
|---|---------|--------------------|-----------|-----------|
| pH (1:5, p/v) | 8.07 | 7.98 | 8.16 | 8.14 |
| Electrical conductivity (1:10, p/v) ($\mu\text{S cm}^{-1}$) | 5,570 | 1,168 | 3,790 | 4,510 |
| Bulk density (fresh) (g cm^{-3}) | 0.601 | 0.614 | 0.548 | 0.575 |
| Bulk density (dry) (g cm^{-3}) | 0.111 | 0.133 | 0.119 | 0.120 |
| Particle real density (g cm^{-3}) | 1.904 | 2.024 | 1.920 | 1.934 |
| Total porespace (%) | 94.2 | 93.4 | 93.8 | 93.8 |
| Water-holding capacity (%) | 727 | 598 | 638 | 615 |
| Active lime (%) | 11.79 | --- | 11.15 | 11.89 |
| Total carbonates (%) | 28.81 | --- | 25.98 | 25.75 |
| Mites | Absence | Absence | Absence | Absence |
| Nematodes | Absence | Absence | Absence | Absence |
| Competitor molds | Absence | Absence | Absence | Absence |