Table S1. Statistical results and coefficients of models of mushrooms under different drying conditions.

| Control |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Temp. $\left({ }^{\circ} \mathrm{C}\right)$ | Constants | R ${ }^{2}$ | $\chi^{2}$ | RMSE |
| Henderson and Pabis | 40 | $\mathrm{k}=0.002232, \mathrm{a}=4.313$ | 0.9913 | 0.0611 | 0.1250 |
|  | 50 | $\mathrm{k}=0.003578, \mathrm{a}=4.964$ | 0.9928 | 0.0580 | 0.1331 |
|  | 60 | $\mathrm{k}=0.004915, \mathrm{a}=5.958$ | 0.9995 | 0.0190 | 0.0438 |
| Logarithmic | 40 | $\mathrm{a}=4.07, \mathrm{c}=0.3989, \mathrm{k}=0.002959$ | 0.9983 | 0.0464 | 0.0558 |
|  | 50 | $\mathrm{a}=5.449, \mathrm{c}=-0.5924, \mathrm{k}=0.002805$ | 0.9962 | 0.0473 | 0.0977 |
|  | 60 | $\mathrm{a}=6.032, \mathrm{c}=-0.1061, \mathrm{k}=0.0048$ | 0.9996 | 0.0335 | 0.0366 |
| Two-term | 40 | $\begin{gathered} \mathrm{a}=1.61, \mathrm{~b}=2.992, \mathrm{k} 0=0.0068, \mathrm{k} 1= \\ 0.0016 \end{gathered}$ | 0.9997 | 0.0349 | 0.0232 |
|  | 50 | $\begin{gathered} a=-1.992, b=6.662, k 0=0.01093, \\ k 1=0.00443 \end{gathered}$ | 0.9986 | 0.0263 | 0.0597 |
|  | 60 | $\begin{gathered} \mathrm{a}=18.27, \mathrm{~b}=-12.36, \mathrm{k} 0=0.0059, \mathrm{k} 1= \\ 0.0065 \end{gathered}$ | 0.9997 | 0.0232 | 0.0349 |
| Verma | 40 | $\mathrm{a}=4.273, \mathrm{~g}=21.1, \mathrm{k}=0.002205$ | 0.8422 | 0.3145 | 0.5396 |
|  | 50 | $\mathrm{a}=-4.099, \mathrm{~g}=0.003707, \mathrm{k}=0.23$ | 0.8026 | 0.4720 | 0.7071 |
|  | 60 | $a=-4.982, g=0.004941, \mathrm{k}=0.473$ | 0.7408 | 0.5421 | 0.9829 |
|  | 40 | $\begin{gathered} \mathrm{M} 0=4.171, \mathrm{a}=-0.007404, \\ \mathrm{~b}=0.001934 \end{gathered}$ | 0.9841 | 0.0712 | 0.1712 |
| Wang and Singh | 50 | $\begin{aligned} \mathrm{M} 0= & 4.788, \mathrm{a}=-0.0132, \\ & \mathrm{~b}=0.003161 \end{aligned}$ | 0.9985 | 0.0420 | 0.0611 |
|  | 60 | $\begin{gathered} \mathrm{M} 0=5.684, \mathrm{a}=-0.02103, \\ \mathrm{~b}=0.004599 \end{gathered}$ | 0.9967 | 0.0342 | 0.1105 |
|  | 40 | $\begin{aligned} & a=4.668, b=0.0001045, \\ & k=0.007162, n=0.8326 \end{aligned}$ | 0.9998 | 0.0211 | 0.0213 |
| Midilli | 50 | $\begin{aligned} & \mathrm{a}=4.651, \mathrm{~b}=0.0001678 \\ & \mathrm{k}=0.0007363, \mathrm{n}=1.272 \end{aligned}$ | 0.9987 | 0.0914 | 0.0582 |
|  | 60 | $\begin{gathered} a=5.89, b=-1 e-05, k=0.00405, \\ n=1.033 \end{gathered}$ | 0.9917 | 0.0324 | 0.0360 |
|  | 40 | $\begin{gathered} \mathrm{a}=0.2069, \mathrm{~b}=7.159 \mathrm{e}-08, \mathrm{c}=4.331, \mathrm{~g}= \\ 10.18, \mathrm{~h}=0.002244, \mathrm{k}=0.1508 \end{gathered}$ | 0.9991 | 0.0128 | 0.0227 |
| Modified Henderson and Pabis | 50 | $\begin{gathered} \mathrm{a}=0.417, \mathrm{~b}=4.964, \mathrm{c}=1.257, \mathrm{~g}= \\ 0.003578, \mathrm{~h}=3.311 \\ \mathrm{k}=4.112 \end{gathered}$ | 0.9998 | 0.0101 | 0.0176 |
|  | 60 | $\begin{gathered} \mathrm{a}=0.4722, \mathrm{~b}=4.259, \mathrm{c}=1.517 \\ \mathrm{~g}=0.004707, \mathrm{~h}=0.004711, \mathrm{k}=11.67 \end{gathered}$ | 0.9997 | 0. 0137 | 0.0147 |

Table S1. (Continued) Statistical results and coefficients of models of mushrooms under different drying conditions.

| UV-B treated samples for 30 min |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Temp. $\left({ }^{\circ} \mathrm{C}\right)$ | Constants | $\mathbf{R}^{2}$ | $\chi^{2}$ | RMSE |
| Henderson and Pabis | 40 | $\mathrm{k}=0.002698, \mathrm{a}=4.938$ | 0.9901 | 0.0745 | 0.1475 |
|  | 50 | $\mathrm{k}=0.003831, \mathrm{a}=5.034$ | 0.994 | 0.0406 | 0.1167 |
|  | 60 | $\mathrm{k}=0.00528, \mathrm{a}=5.93$ | 0.9908 | 0.0647 | 0.1711 |
| Logarithmic | 40 | $a=6.43, c=-1.656, k=0.001591$ | 0.9982 | 0.0398 | 0.0631 |
|  | 50 | $a=5.796, c=-0.8896, \mathrm{k}=0.0028$ | 0.9985 | 0.0877 | 0.0604 |
|  | 60 | $\mathrm{a}=6.776, \mathrm{c}=-1.007, \mathrm{k}=0.003853$ | 0.9965 | 0.0519 | 0.1077 |
| Two-term | 40 | $\begin{aligned} & \mathrm{a}=-34.1 .61, \mathrm{~b}=41.057 \\ & \mathrm{k} 0=0.0097, \mathrm{kl}=0.0061, \end{aligned}$ | 0.9878 | 0.0720 | 0.0841 |
|  | 50 | $\begin{gathered} \mathrm{a}=-39.15, \mathrm{~b}=43.98 \\ \mathrm{k} \_0=0.0064, \mathrm{kl}=0.0057 \end{gathered}$ | 0.9986 | 0.0774 | 0.0580 |
|  | 60 | $\begin{gathered} \mathrm{a}=-32.5, \mathrm{~b}=38.11, \mathrm{k} 0=0.009506, \mathrm{kl}= \\ 0.008545 \end{gathered}$ | 0.9987 | 0.0866 | 0.0675 |
| Verma | 40 | $\mathrm{a}=4.95, \mathrm{~g}=9.161, \mathrm{k}=0.002707$ | 0.7714 | 0.4132 | 0.7204 |
|  | 50 | $\mathrm{a}=-4.086, \mathrm{~g}=0.003887, \mathrm{k}=0.3075$ | 0.7179 | 0.5771 | 0.8183 |
|  | 60 | $a=-5.121, g=0.0054, k=0.2483$ | 0.6899 | 0.6953 | 1.0401 |
|  | 40 | $\begin{gathered} \mathrm{M} 0=4.74, \mathrm{a}=-0.0094, \\ \mathrm{~b}=0.0021 \end{gathered}$ | 0.9982 | 0.0874 | 0.0634 |
| Wang and Singh | 50 | $\begin{gathered} \mathrm{M} 0=4.856, \mathrm{a}=-0.0144 \\ \mathrm{~b}=0.0034 \end{gathered}$ | 0.9993 | 0.0395 | 0.0405 |
|  | 60 | $\begin{gathered} \mathrm{M} 0=5.723, \mathrm{a}=-0.0233, \\ \mathrm{~b}=0.0051 \end{gathered}$ | 0.9986 | 0.0727 | 0.0699 |
|  | 40 | $\begin{gathered} \mathrm{a}=4.661, \mathrm{~b}=-1 \mathrm{e}-05 \\ \mathrm{k}=0.0006231, \mathrm{n}=1.235 \end{gathered}$ | 0.9955 | 0.3036 | 0.1006 |
| Midilli | 50 | $\begin{gathered} a=4.409, b=-0.008301 \\ k=2.948, n=-8.948 \end{gathered}$ | 0.9376 | 0.0971 | 0.1472 |
|  | 60 | $\begin{aligned} \mathrm{a}=5.023, \mathrm{~b} & =-0.01201, \mathrm{k}=2.817 \\ \mathrm{n} & =-9.467 \end{aligned}$ | 0.9562 | 0.0872 | 0.1532 |
|  | 40 | $\begin{gathered} a=-5.185, b=9.846, c=0.1977 \\ g=0.003771, h=2.767 \\ k=0.005849 \end{gathered}$ | 0.9991 | 0.0282 | 0.0396 |
| Modified Henderson and Pabis | 50 | $\begin{gathered} \mathrm{a}=-16, \mathrm{~b}=5.047, \mathrm{c}=15.92, \mathrm{~g}= \\ 0.003846, \mathrm{~h}=1.963, \mathrm{k}=19.27 \end{gathered}$ | 0.9994 | 0.0157 | 0.0264 |
|  | 60 | $\begin{gathered} \mathrm{a}=5.935, \mathrm{~b}=1.888, \mathrm{c}=2.128, \mathrm{~g}= \\ 0.7046, \mathrm{~h}=10.78, \mathrm{k}=0.005234 \end{gathered}$ | 0.9992 | 0.0220 | 0.0298 |

Table S1. (Continued) Statistical results and coefficients of models of mushrooms under different drying conditions.

| UV-B treated samples for 60 min |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Temp. $\left({ }^{\circ} \mathrm{C}\right)$ | Constants | $\mathbf{R}^{2}$ | $\chi^{2}$ | RMSE |
| Henderson and Pabis | 40 | $\mathrm{k}=0.002458$, $\mathrm{a}=3.583$ | 0.9882 | 0.0701 | 0.1111 |
|  | 50 | $k=0.004536, a=5.531$ | 0.995 | 0.0953 | 0.1201 |
|  | 60 | $\mathrm{k}=0.00518, \mathrm{a}=4.694$ | 0.9861 | 0.0762 | 0.1622 |
|  | 40 | $\begin{gathered} a=5.356, c=-1.898 \\ k=0.001216 \end{gathered}$ | 0.9977 | 0.0632 | 0.0502 |
| Logarithmic | 50 | $\begin{gathered} a=5.964, c=-0.5355, \\ k=0.003719 \end{gathered}$ | 0.9975 | 0.0761 | 0.0874 |
|  | 60 | $\mathrm{a}=5.948, \mathrm{c}=-1.42, \mathrm{k}=0.003185$ | 0.9963 | 0.0771 | 0.0861 |
|  | 40 | $\begin{gathered} \mathrm{a}=47.47, \mathrm{~b}=-44.04, \\ \mathrm{k} 0=0.004045, \mathrm{kl}=0.004243 \end{gathered}$ | 0.9944 | 0.0976 | 0.0793 |
| Two-term | 50 | $\begin{gathered} a=10.12, \mathrm{~b}=-4.819 \\ \mathrm{k} 0=0.006055, \mathrm{kl}=0.009356 \end{gathered}$ | 0.999 | 0.0884 | 0.0557 |
|  | 60 | $\begin{gathered} \mathrm{a}=7.04, \mathrm{~b}=-0.5704 \\ \mathrm{k} 0=0.006336, \mathrm{kl}=2.213 \end{gathered}$ | 0.9944 | 0.0940 | 0.1686 |
|  | 40 | $\begin{gathered} \mathrm{a}=3.596, \mathrm{~g}=10.14, \\ \mathrm{k}=0.002471 \end{gathered}$ | 0.7888 | 0.245 | 0.4775 |
| Verma | 50 | $a=-4.635, g=0.0046, \mathrm{k}=0.2789$ | 0.7172 | 0.3715 | 0.9217 |
|  | 60 | $\begin{gathered} \mathrm{a}=7.041, \mathrm{~g}=3.033, \\ \mathrm{k}=0.006336 \end{gathered}$ | 0.6837 | 0.0890 | 1.2342 |
|  | 40 | $\mathrm{M} 0=3.442, \mathrm{a}=-0.0062, \mathrm{~b}=0.0016$ | 0.9974 | 0.0400 | 0.0525 |
| Wang and Singh | 50 | $\mathrm{M} 0=5.345, \mathrm{a}=-0.0191, \mathrm{~b}=0.0043$ | 0.9996 | 0.0153 | 0.0325 |
|  | 60 | $\mathrm{M} 0=6.627, \mathrm{a}=-0.0315, \mathrm{~b}=0.0064$ | 0.9988 | 0.0616 | 0.0763 |
|  | 40 | $\begin{gathered} a=3.286, b=-0.0045 \\ k=3.75, n=-8.396 \end{gathered}$ | 0.5978 | 0.1752 | 0.6706 |
| Midilli | 50 | $\begin{gathered} \mathrm{a}=4.705, \mathrm{~b}=-0.009778 \\ \mathrm{k}=6.602, \mathrm{n}=-13.88 \end{gathered}$ | 0.5314 | 0.7121 | 1.2132 |
|  | 60 | $\begin{gathered} a=5.67, b=-0.01502 \\ k=1.023 e+04, n=-44.56 \end{gathered}$ | 0.4981 | 0.5722 | 1.5950 |
|  | 40 | $\begin{gathered} a=3.596, b=9.925, c=-10.02, g=3.261, \\ h=4.913, k=0.002471 \end{gathered}$ | 0.9994 | 0.0321 | 0.0418 |
| Modified Henderson and Pabis | 50 | $\begin{aligned} & \mathrm{a}=2.451 \mathrm{e}-08, \mathrm{~b}=5.531, \mathrm{c}=2.584, \mathrm{~g}= \\ & 0.004536, \mathrm{~h}=0.3869, \mathrm{k}=4.997 \end{aligned}$ | 0.9995 | 0.0245 | 0.0218 |
|  | 60 | $\begin{gathered} a=7.68, b=6.894, c=2.71, g=0.006153, \\ h=1.199, k=1.219 \end{gathered}$ | 0.9991 | 0.0138 | 0.0203 |

Table S1. (Continued) Statistical results and coefficients of models of mushrooms under different drying conditions.

| UV-B treated samples for 90 min |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Temp. $\left({ }^{\circ} \mathrm{C}\right)$ | Constants | $\mathbf{R}^{2}$ | $\chi^{2}$ | RMSE |
| Henderson and Pabis | 40 | $\mathrm{k}=0.003313, \mathrm{a}=4.355$ | 0.9902 | 0.0913 | 0.1296 |
|  | 50 | $\mathrm{k}=0.004781, \mathrm{a}=4.718$ | 0.9938 | 0.0793 | 0.1106 |
|  | 60 | $\mathrm{k}=0.006477, \mathrm{a}=5.252$ | 0.9874 | 0.0938 | 0.1768 |
| Logarithmic | 40 | $\mathrm{a}=0.782, \mathrm{c}=1.278, \mathrm{k}=0.002002$ | 0.9597 | 0.0417 | 0.0974 |
|  | 50 | $\mathrm{a}=5.231, \mathrm{c}=-0.614, \mathrm{k}=0.003729$ | 0.9972 | 0.0422 | 0.0762 |
|  | 60 | $\mathrm{a}=5.867, \mathrm{c}=-0.7453, \mathrm{k}=0.004942$ | 0.9928 | 0.0594 | 0.1373 |
| Two-term | 40 | $\begin{gathered} a=39.17, b=-35.06, \\ k 0=0.005508, k 1=0.005952 \end{gathered}$ | 0.9983 | 0.0473 | 0.0561 |
|  | 50 | $\begin{gathered} a=39.55, b=-35.02 \\ k 0=0.007445, k 1=0.007986 \end{gathered}$ | 0.9985 | 0.0357 | 0.0573 |
|  | 60 | $\begin{gathered} \mathrm{a}=37.077, \mathrm{~b}=-32.195 \\ \mathrm{k} 0=0.008298, \mathrm{k} 1=0.02223 \end{gathered}$ | 0.9973 | 0.0743 | 0.0865 |
| Verma | 40 | $\mathrm{a}=4.455, \mathrm{~g}=0.2495, \mathrm{k}=0.00342$ | 0.7817 | 0.2481 | 0.6222 |
|  | 50 | $a=-3.742, g=0.004816, k=20$ | 0.6912 | 0.3912 | 0.7999 |
|  | 60 | $\mathrm{a}=5.38, \mathrm{~g}=10.89, \mathrm{k}=0.006701$ | 0.6673 | 0.5713 | 0.9346 |
|  | 40 | $\begin{gathered} \mathrm{M} 0=4.199, \mathrm{a}=-0.01062, \\ \mathrm{~b}=0.002682 \end{gathered}$ | 0.9983 | 0.0673 | 0.0541 |
| Wang and Singh | 50 | $\begin{gathered} \mathrm{M} 0=4.565, \mathrm{a}=-0.01728, \\ \mathrm{~b}=0.004275 \end{gathered}$ | 0.9992 | 0.0243 | 0.0398 |
|  | 60 | $\begin{gathered} \mathrm{M} 0=5.064, \mathrm{a}=-0.02561, \\ \mathrm{~b}=0.005941 \end{gathered}$ | 0.9959 | 0.0982 | 0.1035 |
|  | 40 | $\begin{gathered} a=3.885, b=-0.006528, \\ k=4.866, n=-27.58 \end{gathered}$ | 0.6059 | 0.2351 | 0.8525 |
| Midilli | 50 | $\begin{gathered} \mathrm{a}=4.062, \mathrm{~b}=-0.009288, \\ \mathrm{k}=8.109, \mathrm{n}=-10.35 \end{gathered}$ | 0.4685 | 0.0976 | 1.0753 |
|  | 60 | $\begin{gathered} \mathrm{a}=4.111, \mathrm{~b}=-0.01256, \mathrm{k}=0.07225, \\ \mathrm{n}=-8.142 \end{gathered}$ | 0.4329 | 1.0624 | 1.2110 |
|  | 40 | $\begin{aligned} & \mathrm{a}=0.03427, \mathrm{~b}=4.317, \mathrm{c}=0.002789 \\ & \mathrm{~g}=0.003267, \mathrm{~h}=0.6401, \mathrm{k}=0.5542 \end{aligned}$ | 0.9996 | 0.0141 | 0.0443 |
| Modified Henderson and Pabis | 50 | $\begin{gathered} a=1.238, b=9.183, c=4.718 \\ g=9.991, h=0.004781, k=0.5382 \\ a=2.972, b=6.213, c=-4.534 \end{gathered}$ | 0.9998 | 0.0237 | 0.0316 |
|  | 60 | $\begin{gathered} \mathrm{g}=0.008611, \mathrm{~h}=0.04144, \mathrm{k}= \\ 0.05117 \end{gathered}$ | 0.9991 | 0.0181 | 0.0497 |

