**Supporting Information**

**Paper title:** Modelling photosynthetic rates of Indian red mangroves (*Rhizophora mucronata* Poir.) to climatic factors

**Authors:** Tanumi Kumar, T. V. R. Murthy, Prabakaran Chellamani, Vanitha Krishnan, T. Thangaradjou & R. Mani Murali

**Table 1S.** Mean values (with ± SE values of the population means within parenthesis) of the *in-situ* measured parameters for *R. mucronata* sun leaves. *C*i – intercellular CO2 concentration; *CO2R* – reference cell (air) CO2; *CO2S* – sample cell (leaf chamber/ IRGA) CO2; *CTleaf* – computed leaf temperature; *g*s– stomatal conductance; *H2OR* – reference cell H2O; *H2OS –* sample cell H2O; *PARi*– in-chamber quantum sensor (*PAR* or PPFD); *PARo*– external quantum sensor (*PAR* or PPFD); *RH\_R* – relative humidity in the reference cell; *RH\_S* – relative humidity in the sample cell; *TBlk* – temperature of the cooler block; *T*r – rate of transpiration; *TS*– temperature in sample cell; *VpdA* – vapour pressure deficit on air temperature; *VpdL* – vapour pressure deficit on leaf temperature.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Time  [h] | *PARo*  [μmol m–2 s–1] | *PARi*  [μmol m–2 s–1] | *TS*  [°С] | *CTleaf*  [°С] | *CO2R*  [μmol(CO2) mol–1] | *CO2S*  [μmol(CO2) mol–1] | *C*i  [μmol(CO2) mol–1] | *g*s  [mol (H2O) m–2 s–1] | *TBlk*  [°С] | *Tr*  [mmol (H2O) m–2 s–1] | *VpdA*  [kPa] | *VpdL*  [kPa] | *H2OR*  [mmol (H2O) mol–1] | *H2OS*  [mmol (H2O) mol–1] | *RH\_R*  [%] | *RH\_S*  [%] |
| 06:39 | 9.11  (±1.28) | 12.90  (±0.63) | 27.56  (±0.02) | 28.35  (±0.01) | 439.56  (±1.14) | 438.71  (±0.71) | 411.99  (±14.24) | 0.03  (±0.00) | 27.69  (±0.02) | 0.36  (±0.04) | 1.07  (±0.00) | 1.16  (±0.00) | 26.57  (±0.02) | 27.00  (±0.03) | 72.24  (±0.12) | 73.40  (±0.02) |
| 07:31 | 53.37  (±5.69) | 73.46  (±0.75) | 26.73  (±0.01) | 27.34  (±0.00) | 413.74  (±0.20) | 411.02  (±1.15) | 455.34  (±41.90) | -0.08  (±0.00) | 26.74  (±0.01) | -0.85  (±0.03) | 0.89  (±0.00) | 0.96  (±0.00) | 27.74  (±0.01) | 26.75  (±0.05) | 79.23  (±0.01) | 76.41  (±0.11) |
| 08:15 | 62.02  (±16.28) | 115.01  (±5.39) | 27.77  (±0.02) | 28.30  (±0.02) | 408.22  (±0.25) | 402.82  (±0.46) | 1334.53  (±214.06) | -0.01  (±0.00) | 27.77  (±0.02) | -0.10  (±0.02) | 0.88  (±0.00) | 0.94  (±0.00) | 29.18  (±0.01) | 29.07  (±0.03) | 78.49  (±0.06) | 78.19  (±0.00) |
| 09:02 | 264.04  (±17.11) | 267.01  (±14.30) | 29.90  (±0.01) | 30.44  (±0.02) | 390.13  (±2.10) | 384.49  (±2.85) | 311.86  (±5.25) | 0.10  (±0.01) | 29.91  (±0.01) | 1.16  (±0.11) | 1.06  (±0.01) | 1.13  (±0.01) | 30.81  (±0.08) | 32.16  (±0.05) | 73.27  (±0.12) | 76.48  (±0.19) |
| 09:48 | 87.38  (±12.42) | 240.89  (±19.21) | 32.10  (±0.02) | 32.86  (±0.03) | 381.78  (±0.62) | 376.72  (±0.76) | 278.38  (±12.17) | 0.09  (±0.01) | 32.17  (±0.02) | 1.46  (±0.21) | 1.49  (±0.02) | 1.60  (±0.03) | 32.17  (±0.42) | 33.86  (±0.18) | 67.51  (±0.95) | 71.06  (±0.44) |
| 10:39 | 107.12  (±29.50) | 289.50  (±34.26) | 33.07  (±0.01) | 33.69  (±0.01) | 387.53  (±3.38) | 375.48  (±2.35) | 233.90  (±2.64) | 0.11  (±0.01) | 33.13  (±0.01) | 2.10  (±0.20) | 1.86  (±0.02) | 1.95  (±0.02) | 30.36  (±0.44) | 32.80  (±0.20) | 60.27  (±0.83) | 65.13  (±0.36) |
| 11:26 | 83.50  (±15.18) | 250.15  (±21.61) | 32.29  (±0.05) | 32.71  (±0.04) | 371.58  (±0.43) | 362.07  (±0.44) | 168.09  (±10.37) | 0.07  (±0.00) | 32.31  (±0.05) | 1.11  (±0.02) | 1.61  (±0.01) | 1.67  (±0.01) | 31.47  (±0.03) | 32.77  (±0.03) | 65.31  (±0.20) | 67.99  (±0.16) |
| 12:16 | 222.90  (±4.92) | 326.44  (±1.95) | 32.43  (±0.05) | 32.94  (±0.03) | 366.13  (±0.74) | 356.61  (±0.03) | 155.52  (±8.52) | 0.06  (±0.00) | 32.46  (±0.05) | 1.10  (±0.05) | 1.65  (±0.01) | 1.72  (±0.01) | 31.62  (±0.26) | 32.90  (±0.20) | 65.05  (±0.35) | 67.68  (±0.22) |
| 13:05 | 185.07  (±19.34) | 185.81  (±21.27) | 31.76  (±0.02) | 32.24  (±0.02) | 362.85  (±0.83) | 354.43  (±0.52) | 146.73  (±9.69) | 0.05  (±0.00) | 31.80  (±0.03) | 0.86  (±0.03) | 1.50  (±0.00) | 1.56  (±0.00) | 31.61  (±0.03) | 32.62  (±0.03) | 67.46  (±0.09) | 69.60  (±0.03) |
| 13:47 | 203.87  (±7.66) | 298.20  (±17.75) | 31.94  (±0.02) | 32.50  (±0.03) | 366.50  (±0.59) | 357.58  (±0.53) | 166.58  (±13.78) | 0.06  (±0.00) | 31.95  (±0.02) | 1.04  (±0.07) | 1.52  (±0.00) | 1.60  (±0.00) | 31.77  (±0.00) | 32.98  (±0.08) | 67.11  (±0.08) | 69.66  (±0.09) |
| 14:34 | 293.18  (±3.01) | 320.60  (±0.46) | 32.28  (±0.00) | 32.86  (±0.00) | 358.42  (±0.09) | 346.79  (±0.04) | 67.36  (±1.82) | 0.06  (±0.00) | 32.32  (±0.00) | 0.97  (±0.00) | 1.63  (±0.00) | 1.71  (±0.00) | 31.73  (±0.00) | 32.86  (±0.01) | 65.67  (±0.01) | 68.01  (±0.01) |
| 15:26 | 146.97  (±1.11) | 88.21  (±0.26) | 31.85  (±0.00) | 32.42  (±0.00) | 379.68  (±0.06) | 373.74  (±0.03) | 254.00  (±1.32) | 0.07  (±0.00) | 31.93  (±0.00) | 1.13  (±0.00) | 1.60  (±0.00) | 1.68  (±0.00) | 30.65  (±0.01) | 31.97  (±0.00) | 64.96  (±0.01) | 67.75  (±0.00) |
| 16:55 | 9.45  (±0.27) | 15.32  (±0.25) | 29.89  (±0.00) | 30.66  (±0.00) | 378.35  (±0.08) | 377.09  (±0.05) | 314.32  (±1.04) | 0.03  (±0.00) | 29.97  (±0.00) | 0.38  (±0.00) | 1.28  (±0.00) | 1.38  (±0.00) | 29.91  (±0.00) | 30.35  (±0.00) | 70.92  (±0.00) | 71.97  (±0.01) |

**Table 2S.** Mean values (with ± SE values of the population means within parenthesis) of the *in-situ* measured parameters for *R. mucronata* shade leaves. *C*i – intercellular CO2 concentration; *CO2R* – reference cell (air) CO2; *CO2S* – sample cell (leaf chamber/ IRGA) CO2; *CTleaf* – computed leaf temperature; *g*s– stomatal conductance; *H2OR* – reference cell H2O; *H2OS –* sample cell H2O; *PARi*– in-chamber quantum sensor (*PAR* or PPFD); *PARo*– external quantum sensor (*PAR* or PPFD); *RH\_R* – relative humidity in the reference cell; *RH\_S* – relative humidity in the sample cell; *TBlk* – temperature of the cooler block; *T*r – rate of transpiration; *TS*– temperature in sample cell; *VpdA* – vapour pressure deficit on air temperature; *VpdL* – vapour pressure deficit on leaf temperature.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Time  [h] | *PARo*  [μmol m–2 s–1] | *PARi*  [μmol m–2 s–1] | *TS*  [°С] | *CTleaf*  [°С] | *CO2R*  [μmol(CO2) mol–1] | *CO2S*  [μmol(CO2) mol–1] | *C*i  [μmol(CO2) mol–1] | *g*s  [mol (H2O) m–2 s–1] | *TBlk*  [°С] | *Tr*  [mmol (H2O) m–2 s–1] | *VpdA*  [kPa] | *VpdL*  [kPa] | *H2OR*  [mmol (H2O) mol–1] | *H2OS*  [mmol (H2O) mol–1] | *RH\_R*  [%] | *RH\_S*  [%] |
| 06:42 | 3.63  (±0.20) | 1.58  (±0.36) | 27.78  (±0.02) | 28.52  (±0.01) | 434.26  (±1.07) | 433.05  (±1.08) | 402.54  (±6.52) | 0.06  (±0.00) | 27.92  (±0.02) | 0.65  (±0.01) | 1.08  (±0.00) | 1.16  (±0.00) | 26.56  (±0.00) | 27.32  (±0.01) | 71.27  (±0.08) | 73.32  (±0.06) |
| 07:34 | 23.34  (±0.48) | 11.99  (±3.01) | 26.96  (±0.03) | 27.62  (±0.03) | 410.41  (±0.23) | 406.20  (±0.18) | 532.78  (±9.41) | -0.05  (±0.00) | 26.99  (±0.03) | -0.46  (±0.03) | 0.89  (±0.01) | 0.96  (±0.01) | 27.83  (±0.02) | 27.30  (±0.01) | 78.45  (±0.20) | 76.95  (±0.10) |
| 08:18 | 28.16  (±0.63) | 8.19  (±0.02) | 28.05  (±0.00) | 28.78  (±0.00) | 410.60  (±0.03) | 408.01  (±0.02) | 485.37  (±0.11) | -0.04  (±0.00) | 28.09  (±0.00) | -0.46  (±0.00) | 0.92  (±0.00) | 1.00  (±0.00) | 30.02  (±0.01) | 29.48  (±0.00) | 79.40  (±0.01) | 77.97  (±0.01) |
| 09:05 | 73.31  (±0.16) | 35.85  (±0.26) | 30.07  (±0.00) | 30.82  (±0.00) | 384.18  (±0.12) | 386.51  (±0.01) | 440.02  (±3.22) | 0.06  (±0.00) | 30.13  (±0.00) | 0.76  (±0.00) | 1.19  (±0.00) | 1.28  (±0.00) | 30.72  (±0.00) | 31.60  (±0.00) | 72.32  (±0.01) | 74.39  (±0.01) |
| 09:51 | 42.51  (±0.30) | 11.50  (±0.05) | 32.09  (±0.00) | 32.20  (±0.03) | 384.23  (±0.05) | 386.39  (±0.08) | 415.33  (±0.69) | 0.10  (±0.00) | 32.20  (±0.00) | 1.85  (±0.00) | 1.68  (±0.00) | 1.83  (±0.01) | 30.36  (±0.01) | 32.51  (±0.00) | 63.73  (±0.01) | 68.24  (±0.01) |
| 10:42 | 57.52  (±0.56) | 25.72  (±0.56) | 33.12  (±0.00) | 33.70  (±0.00) | 378.38  (±0.01) | 373.10  (±0.01) | 247.00  (±0.58) | 0.06  (±0.00) | 33.20  (±0.00) | 1.11  (±0.00) | 1.87  (±0.00) | 1.96  (±0.00) | 31.48  (±0.01) | 32.77  (±0.01) | 62.33  (±0.01) | 64.89  (±0.01) |
| 11:30 | 70.04  (±0.14) | 11.04  (±0.00) | 32.54  (±0.00) | 33.34  (±0.00) | 371.14  (±0.02) | 367.99  (±0.04) | 241.09  (±2.70) | 0.03  (±0.00) | 32.63  (±0.00) | 0.65  (±0.01) | 1.81  (±0.00) | 1.92  (±0.00) | 31.32  (±0.01) | 32.07  (±0.00) | 64.06  (±0.01) | 65.60  (±0.01) |
| 12:21 | 64.38  (±6.35) | 29.36  (±2.70) | 32.73  (±0.00) | 33.26  (±0.02) | 362.37  (±0.39) | 357.36  (±0.57) | 210.82  (±9.87) | 0.05  (±0.00) | 32.80  (±0.01) | 0.82  (±0.02) | 1.67  (±0.01) | 1.74  (±0.01) | 31.65  (±0.06) | 33.61  (±0.04) | 66.04  (±0.12) | 67.97  (±0.08) |
| 13:07 | 41.09  (±3.22) | 26.71  (±3.27) | 31.90  (±0.01) | 32.64  (±0.10) | 360.72  (±0.18) | 357.69  (±0.56) | 293.86  (±7.04) | 0.06  (±0.00) | 31.99  (±0.01) | 1.03  (±0.05) | 1.59  (±0.02) | 1.69  (±0.03) | 31.21  (±0.04) | 32.41  (±0.04) | 66.08  (±0.08) | 68.62  (±0.12) |
| 13:50 | 57.14  (±5.00) | 24.13  (±2.10) | 32.12  (±0.01) | 32.72  (±0.03) | 361.67  (±0.13) | 357.27  (±0.29) | 263.06  (±6.53) | 0.06  (±0.00) | 32.18  (±0.02) | 1.08  (±0.05) | 1.58  (±0.01) | 1.66  (±0.01) | 31.65  (±0.03) | 32.91  (±0.08) | 66.18  (±0.01) | 68.80  (±0.14) |
| 14:38 | 79.71  (±7.82) | 26.41  (±3.99) | 32.56  (±0.01) | 33.06  (±0.01) | 360.92  (±0.41) | 355.30  (±0.36) | 228.45  (±6.32) | 0.06  (±0.00) | 32.64  (±0.01) | 1.06  (±0.07) | 1.64  (±0.01) | 1.71  (±0.01) | 32.24  (±0.09) | 33.46  (±0.07) | 65.68  (±0.21) | 68.17  (±0.17) |
| 15:29 | 31.56  (±2.53) | 16.18  (±1.26) | 31.92  (±0.02) | 32.39  (±0.03) | 371.71  (±0.70) | 367.73  (±0.74) | 291.80  (±1.53) | 0.07  (±0.00) | 32.01  (±0.02) | 1.20  (±0.03) | 1.61  (±0.01) | 1.68  (±0.01) | 30.56  (±0.02) | 31.96  (±0.02) | 64.51  (±0.03) | 67.46  (±0.10) |
| 16:57 | 3.31  (±1.27) | 1.13  (±0.39) | 29.99  (±0.01) | 30.73  (±0.02) | 374.73  (±1.46) | 373.30  (±1.52) | 279.47  (±4.99) | 0.02  (±0.00) | 30.10  (±0.01) | 0.30  (±0.03) | 1.31  (±0.00) | 1.40  (±0.00) | 29.92  (±0.03) | 30.27  (±0.00) | 70.56  (±0.05) | 71.39  (±0.04) |

**Table 3S.** Pearson’s correlation coefficients amongst *pE* and different parameters for sun leaves of *R. mucronata*. \*\**p*<0.01, \**p*<0.05. *C*i – intercellular CO2 concentration; *CO2R* – reference cell (air) CO2; *CO2S* – sample cell (leaf chamber/ IRGA) CO2; *CTleaf* – computed leaf temperature; *g*s– stomatal conductance; *H2OR* – reference cell H2O; *H2OS –* sample cell H2O; *PARi*– in-chamber quantum sensor (*PAR* or PPFD); *PARo*– external quantum sensor (*PAR* or PPFD); *pE* – photosynthetic rate; *RH\_R* – relative humidity in the reference cell; *RH\_S* – relative humidity in the sample cell; *TBlk* – temperature of the cooler block; *T*r – rate of transpiration; *TS*– temperature in sample cell; *VpdA* – vapour pressure deficit on air temperature; *VpdL* – vapour pressure deficit on leaf temperature.

|  | *pE*  [μmol(CO2) mol–1] | *g*s  [mol (H2O) m–2 s–1] | *C*i  [μmol(CO2) mol–1] | *Tr*  [mmol (H2O) m–2 s–1] | *VpdL*  [kPa] | *CTleaf*  [°С] | *TS*  [°С] | *TBlk*  [°С] | *CO2R*  [μmol(CO2) mol–1] | *CO2S*  [μmol(CO2) mol–1] | *H2OR*  [mmol (H2O) mol–1] | *H2OS*  [mmol (H2O) mol–1] | *RH\_R*  [%] | *RH\_S*  [%] | *PARo*  [μmol m–2 s–1] | *PARi*  [μmol m–2 s–1] | *VpdA*  [kPa] |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *pE*[μmol(CO2) mol–1] | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *g*s[mol (H2O) m–2 s–1] | .464\*\* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *C*i[μmol(CO2) mol–1] | -.290\*\* | -.426\*\* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Tr*[mmol (H2O) m–2 s–1] | .581\*\* | .960\*\* | -.456\*\* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *VpdL*[kPa] | .687\*\* | .683\*\* | -.627\*\* | .814\*\* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| *CTleaf*[°С] | .701\*\* | .757\*\* | -.592\*\* | .836\*\* | .950\*\* | 1 |  |  |  |  |  |  |  |  |  |  |  |
| *TS* [°С] | .725\*\* | .743\*\* | -.586\*\* | .822\*\* | .943\*\* | .998\*\* | 1 |  |  |  |  |  |  |  |  |  |  |
| *TBlk*[°С] | .717\*\* | .748\*\* | -.590\*\* | .826\*\* | .947\*\* | .999\*\* | 1.000\*\* | 1 |  |  |  |  |  |  |  |  |  |
| *CO2R* [μmol(CO2) mol–1] | -.675\*\* | -.449\*\* | .475\*\* | -.490\*\* | -.692\*\* | -.825\*\* | -.844\*\* | -.837\*\* | 1 |  |  |  |  |  |  |  |  |
| *CO2S* [μmol(CO2) mol–1] | -.744\*\* | -.476\*\* | .472\*\* | -.529\*\* | -.723\*\* | -.845\*\* | -.865\*\* | -.857\*\* | .995\*\* | 1 |  |  |  |  |  |  |  |
| *H2OR* [mmol (H2O) mol–1] | .571\*\* | .507\*\* | -.405\*\* | .517\*\* | .640\*\* | .832\*\* | .844\*\* | .838\*\* | -.913\*\* | -.904\*\* | 1 |  |  |  |  |  |  |
| *H2OS* [mmol (H2O) mol–1] | .645\*\* | .732\*\* | -.473\*\* | .754\*\* | .782\*\* | .937\*\* | .942\*\* | .939\*\* | -.876\*\* | -.883\*\* | .952\*\* | 1 |  |  |  |  |  |
| *RH\_R* [%] | -.658\*\* | -.774\*\* | .625\*\* | -.879\*\* | -.976\*\* | -.910\*\* | -.901\*\* | -.907\*\* | .597\*\* | .634\*\* | -.532\*\* | -.722\*\* | 1 |  |  |  |  |
| *RH\_S* [%] | -.650\*\* | -.581\*\* | .648\*\* | -.724\*\* | -.971\*\* | -.860\*\* | -.856\*\* | -.860\*\* | .599\*\* | .632\*\* | -.487\*\* | -.632\*\* | .964\*\* | 1 |  |  |  |
| *PARo*[μmol m–2 s–1] | .752\*\* | .589\*\* | -.356\*\* | .634\*\* | .593\*\* | .712\*\* | .723\*\* | .716\*\* | -.651\*\* | -.691\*\* | .707\*\* | .769\*\* | -.556\*\* | -.471\*\* | 1 |  |  |
| *PARi*[μmol m–2 s–1] | .484\*\* | .390\*\* | -.381\*\* | .311\*\* | .259\* | .432\*\* | .455\*\* | .447\*\* | -.610\*\* | -.616\*\* | .599\*\* | .571\*\* | -.240\* | -.169 | .652\*\* | 1 |  |
| *VpdA*[kPa] | .709\*\* | .673\*\* | -.626\*\* | .804\*\* | .999\*\* | .951\*\* | .948\*\* | .950\*\* | -.710\*\* | -.741\*\* | .651\*\* | .786\*\* | -.974\*\* | -.973\*\* | .603\*\* | .279\* | 1 |

**Table 4S.** Pearson’s correlation coefficients amongst *pE* and different parameters for shade leaves of *R. mucronata*. \*\**p*<0.01, \**p*<0.05. *C*i – intercellular CO2 concentration; *CO2R* – reference cell (air) CO2; *CO2S* – sample cell (leaf chamber/ IRGA) CO2; *CTleaf* – computed leaf temperature; *g*s– stomatal conductance; *H2OR* – reference cell H2O; *H2OS –* sample cell H2O; *PARi*– in-chamber quantum sensor (*PAR* or PPFD); *PARo*– external quantum sensor (PAR or PPFD); *pE* – photosynthetic rate; *RH\_R* – relative humidity in the reference cell; *RH\_S* – relative humidity in the sample cell; *TBlk* – temperature of the cooler block; *T*r – rate of transpiration; *TS*– temperature in sample cell; *VpdA* – vapour pressure deficit on air temperature; *VpdL* – vapour pressure deficit on leaf temperature.

|  | *pE*  [μmol(CO2) mol–1] | *g*s  [mol (H2O) m–2 s–1] | *C*i  [μmol(CO2) mol–1] | *Tr*  [mmol (H2O) m–2 s–1] | *VpdL*  [kPa] | *CTleaf*  [°С] | *TS*  [°С] | *TBlk*  [°С] | *CO2R*  [μmol(CO2) mol–1] | *CO2S*  [μmol(CO2) mol–1] | *H2OR*  [mmol (H2O) mol–1] | *H2OS*  [mmol (H2O) mol–1] | *RH\_R*  [%] | *RH\_S*  [%] | *PARo*  [μmol m–2 s–1] | *PARi*  [μmol m–2 s–1] | *VpdA*  [kPa] |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *pE*[μmol(CO2) mol–1] | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *g*s[mol (H2O) m–2 s–1] | -.230\* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *C*i[μmol(CO2) mol–1] | -.373\*\* | -.606\*\* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Tr*[mmol (H2O) m–2 s–1] | -.142 | .975\*\* | -.629\*\* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *VpdL*[kPa] | .159 | .706\*\* | -.841\*\* | .798\*\* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| *CTleaf*[°С] | .189 | .694\*\* | -.858\*\* | .787\*\* | .978\*\* | 1 |  |  |  |  |  |  |  |  |  |  |  |
| *TS* [°С] | .242\* | .690\*\* | -.873\*\* | .782\*\* | .970\*\* | .997\*\* | 1 |  |  |  |  |  |  |  |  |  |  |
| *TBlk*[°С] | .236\* | .697\*\* | -.875\*\* | .787\*\* | .971\*\* | .997\*\* | 1.000\*\* | 1 |  |  |  |  |  |  |  |  |  |
| *CO2R* [μmol(CO2) mol–1] | -.338\*\* | -.446\*\* | .779\*\* | -.551\*\* | -.809\*\* | -.885\*\* | -.893\*\* | -.889\*\* | 1 |  |  |  |  |  |  |  |  |
| *CO2S* [μmol(CO2) mol–1] | -.408\*\* | -.421\*\* | .788\*\* | -.529\*\* | -.801\*\* | -.876\*\* | -.888\*\* | -.884\*\* | .997\*\* | 1 |  |  |  |  |  |  |  |
| *H2OR* [mmol (H2O) mol–1] | .363\*\* | .404\*\* | -.780\*\* | .514\*\* | .808\*\* | .901\*\* | .909\*\* | .904\*\* | -.935\*\* | -.936\*\* | 1 |  |  |  |  |  |  |
| *H2OS* [mmol (H2O) mol–1] | .255\* | .616\*\* | -.822\*\* | .713\*\* | .895\*\* | .967\*\* | .972\*\* | .970\*\* | -.925\*\* | -.920\*\* | .968\*\* | 1 |  |  |  |  |  |
| *RH\_R* [%] | -.087 | -.859\*\* | .831\*\* | -.910\*\* | -.954\*\* | -.918\*\* | -.916\*\* | -.921\*\* | .702\*\* | .693\*\* | -.668\*\* | -.812\*\* | 1 |  |  |  |  |
| *RH\_S* [%] | -.206 | -.745\*\* | .869\*\* | -.815\*\* | -.976\*\* | -.935\*\* | -.935\*\* | -.939\*\* | .749\*\* | .747\*\* | -.720\*\* | -.827\*\* | .981\*\* | 1 |  |  |  |
| *PARo*[μmol m–2 s–1] | .350\*\* | .260\* | -.470\*\* | .326\*\* | .452\*\* | .550\*\* | .571\*\* | .564\*\* | -.607\*\* | -.617\*\* | .680\*\* | .651\*\* | -.372\*\* | -.390\*\* | 1 |  |  |
| *PARi*[μmol m–2 s–1] | .376\*\* | .340\*\* | -.510\*\* | .426\*\* | .554\*\* | .650\*\* | .666\*\* | .659\*\* | -.638\*\* | -.650\*\* | .764\*\* | .749\*\* | -.458\*\* | -.470\*\* | .717\*\* | 1 |  |
| *VpdA*[kPa] | .210 | .707\*\* | -.861\*\* | .798\*\* | .997\*\* | .981\*\* | .978\*\* | .979\*\* | -.820\*\* | -.816\*\* | .820\*\* | .904\*\* | -.959\*\* | -.983\*\* | .473\*\* | .572\*\* | 1 |