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S3 Appendix - Mean values for chlorophyll fluorescence parameters of the 15 progenies of cacao.

| MEDIUM VALUES | | | | | | | |
|------------------------|------------------|------------------|------------------|---------------------|---------------------|-----------------------|---------------------|
| PROGÊNIES | <i>Fo</i> | <i>Fm</i> | <i>Fv</i> | <i>Fo/Fm</i> | <i>Fv/Fm</i> | <i>PI.Inst</i> | <i>Fv/Fo</i> |
| SCA 6 x SJ02 | 7443 c | 41703c | 34093b | 0.18e | 0.89a | 1.74 c | 4.59 a |
| IMC67 x PUCALA | 7696 b | 42382b | 34403a | 0.18d | 0.81a | 2.15 a | 4.48 b |
| SCA 6 x IMC 67 | 7795 a | 41786c | 33811b | 0.19c | 0.81a | 1.36 d | 4.34 c |
| IMC67 x SCA 24 | 7836 a | 42834a | 34948a | 0.18d | 0.82a | 1.83 c | 4.46 b |
| SCA 6 x PUCALA | 7551 c | 41580c | 33932b | 0.18d | 0.82a | 1.20 d | 4.51 b |
| IMC 67 x SJ 02 | 76222 c | 42040b | 34716a | 0.18d | 0.83a | 2.24 a | 4.56 a |
| SCA 6 x SCA 24 | 7547 c | 41709c | 33755b | 0.18d | 0.82a | 1.62 c | 4.47 b |
| IMC 67 x P4B | 7843 a | 41622c | 33653b | 0.19b | 0.81a | 1.3 d | 4.29 c |
| P4B x PUCALA | 7318 d | 38168g | 31131e | 0.19a | 0.82a | 1.60 c | 4.27 c |
| P4B x SJ 02 | 7538 c | 38992f | 31379e | 0.19a | 0.81a | 1.67 c | 4.18 d |
| PUCALA x SJ 02 | 7573 c | 40635d | 33455b | 0.19c | 0.82a | 1.35 d | 4.43 b |
| SJ 02 x SCA 24 | 7619 c | 38905f | 31811d | 0.20a | 0.82a | 1.21 d | 4.22 d |
| P4B x SCA 24 | 7143 e | 39160f | 31746d | 0.18d | 0.81a | 1.34 d | 4.45 b |
| PUCALA x SCA 24 | 6971 f | 39187f | 32362c | 0.18e | 0.83a | 1.96 b | 4.66 a |
| SCA 6 x P4B | 7230 d | 39704e | 32601 c | 0.18d | 0.82a | 1.04 d | 4.52 b |
| General mean | 7515 | 40694 | 33186 | 0.19 | 0.82 | 1.57 | 4.43 |
| Range | 6921 ~ 7883 | 37395 ~ 43018 | 30693 ~ 35386 | 0.18 ~ 0.20 | 0.80 ~ 0.85 | 0.91 ~ 2.28 | 4.12 ~ 4.71 |
| C.V. (%) | 1.2 | 0.9 | 1.2 | 1.4 | 1.3 | 9.80 | 1.5 |

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Means followed by different letters in the same column represent statistically significant differences (Scott-Knott, 5%).

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Initial chlorophyll fluorescence (*Fo*), maximal chlorophyll fluorescence (*Fm*), variable chlorophyll fluorescence (*Fm*–*Fo*) (*Fv*), maximal photochemical efficiency of PSII (*Fv/Fm*), maximum quantum quantum yield of PS2 photochemistry (*Fv/Fo*), quantum yield baseline (*Fo/Fm*) e o performance index ou plant vitality (*PI Inst*). C.V = coefficient of variation, Range = Refers to the most contrasting plants among all progenies.

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