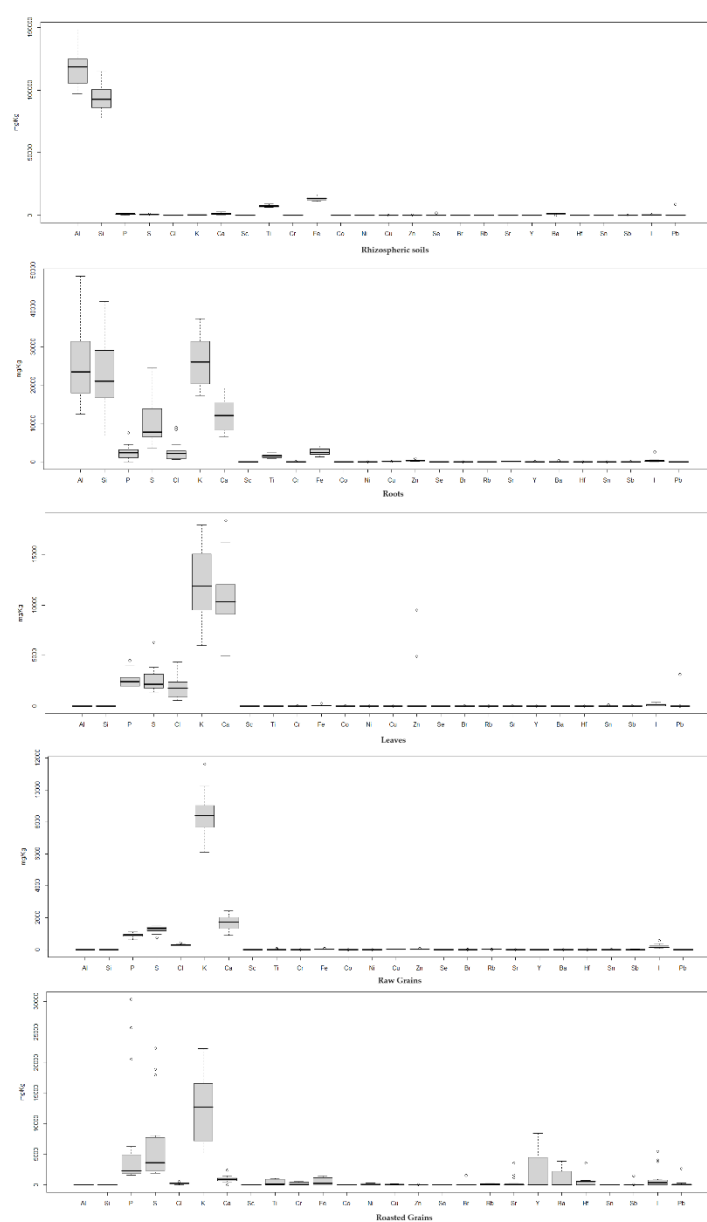
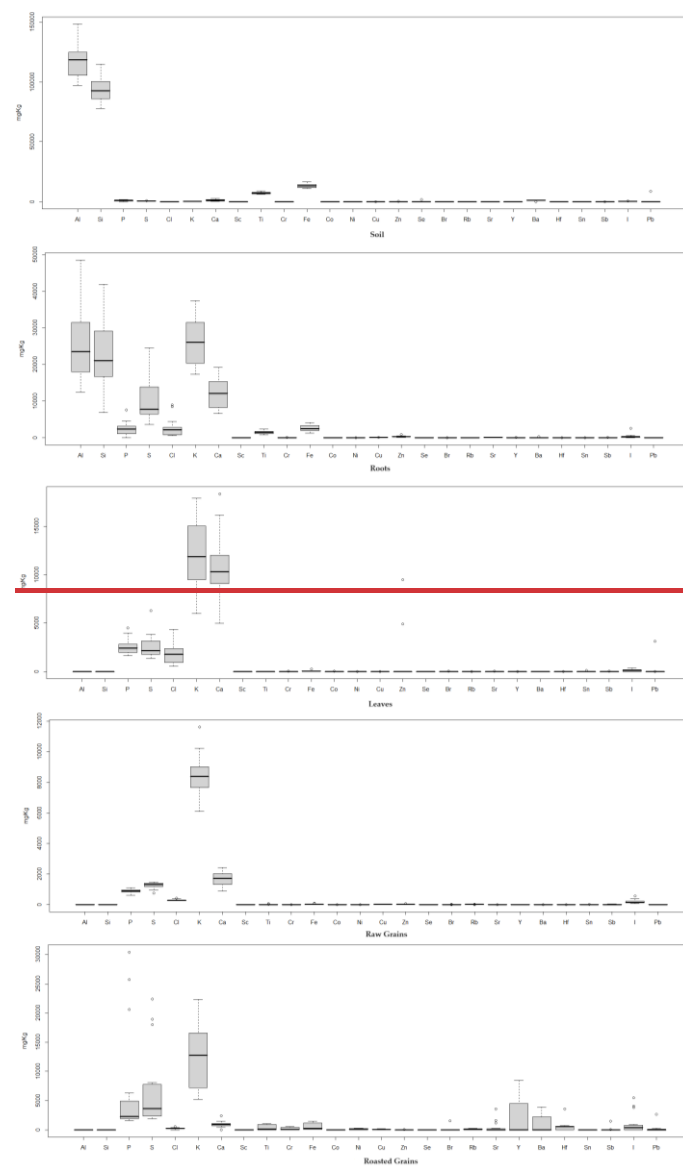


Supporting Information

# Phenotypic Diversity and Genetic Parameters of *Coffea canephora* Clones

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**Figure S1.** Comparison of the inorganic components analyzed in rhizospheric soils ~~soil~~, root, leaves, raw and roasted beans of *C. canephora*. Boxes show the 25th and 75% quartiles, bars show the 10th and 90% quartiles, filled squares show the median, empty circles show outliers. Significant at 5% by ANOVA.

**Table S1.** Values of average concentrations of chemical elements of leaves (mg.kg<sup>-1</sup>), productivity, and grain yield (60 kg bags.ha<sup>-1</sup>) separated by the Scott-Knott test and standard deviation of 15 clones of *C. canephora*, evaluated in Manaus-AM.

| Clones   | Phosphorus | Sulfur      | Chlorine   | Potassium    | Calcium     | Titanium    | Vanadium | Chromium | Iron     | Cobalt   | Nickel     | Copper     |
|----------|------------|-------------|------------|--------------|-------------|-------------|----------|----------|----------|----------|------------|------------|
| BRS3137  | 4,064.25 a | 3,979.75 a  | 4,590.50 a | 2,7275.00 a  | 14,884.75 a | 8.65 a      | 0.22 a   | 2.06a    | 110.97 a | 0.36 b   | 0.98 a     | 29.05 b    |
|          | ± 1,810.68 | ± 1,264.11  | ± 4,915.83 | 14,565.64    | ± 5,173.59  | ± 4.01      | ± 0.45   | ± 2.32   | ± 25.32  | ± 0.11   | ± 0.56     | ± 24.05    |
| BRS3213  | 4,955.25 a | 2,195.25 a  | 3,236.50 a | 2,5097.50 a  | 10,068.00 a | 7.75 a      | 0.26 a   | 0.75 a   | 65.01 a  | 0.25 b   | 0.61 a     | 19.12 b    |
|          | ± 2,736.47 | ± 229.96    | ± 1,947.35 | 1 6,118.71   | ± 7,619.14  | ± 3.56      | ± 0.31   | ± 0.34   | ± 23.04  | ± 0.04   | ± 0.37     | ± 15.39    |
| BRS1216  | 4,251.75 a | 3,486.00 a  | 2,861.75 a | 29,609.75 a  | 9,551.25 a  | 2,021.11 a  | 0.17 a   | 272.84 a | 74.87 a  | 0.16b    | 697.96 a   | 27.22 b    |
|          | ± 3,611.73 | ± 1,524.05  | ± 1,892.19 | ± 2,7676.40  | ± 3,629.64  | ± 4,027.26  | ± 0.35   | ± 544.11 | ± 25.06  | ± 0.05   | ± 828.19   | ± 26.74    |
| BRS2314  | 2,826.00 a | 2,266.00 a  | 1,903.45 a | 17,331.50 a  | 9,695.25 a  | 1,211.05 a  | 0.23 a   | 4.15 a   | 113.08 a | 12. 07 a | 276.83 a   | 16.91 b    |
|          | ± 839.47   | ± 388.54    | ± 824.74   | ± 6,488.47   | ± 4,744.60  | ± 2,409.30  | ± 0.27   | ± 7.02   | ± 87.16  | ± 9.64   | ± 551.45   | ± 13.76    |
| BRS3210  | 3,958.00 a | 5,114.25 a  | 3,235.17 a | 24,170. 00 a | 19,200.75 a | 908.69 a    | 0.43 a   | 0.67 a   | 115.02 a | 0.53 b   | 0.33 a     | 25.37 b    |
|          | ± 3,725.08 | ± 6,274.72  | ± 4,377.94 | ± 17,037.83  | ± 28,408.39 | ± 1,795.56  | ± 0.86   | ± 0.20   | ± 125.69 | ± 0.45   | ± 0.16     | ± 18.86    |
| BRS3220  | 3,057.50 a | 3,248.50 a  | 2,542.05 a | 17,892.50 a  | 14,530.25 a | 1,534.48 a  | 0.17 a   | 3.46 a   | 115.57 a | 0.63 b   | 619.12 a   | 3,073.05 a |
|          | ± 1,350.97 | ± 2,271.22  | ± 1,514.70 | ± 7,051.88   | ± 14,149.59 | ± 1,761.32  | ± 0.35   | ± 5.67   | ± 152.18 | ± 0.22   | ± 1,237.25 | ± 3,427.56 |
| BRS2336  | 2,300.25 a | 2,152.25 a  | 1,853.50 a | 11,816.50 a  | 11,388.25 a | 1,998.58 a  | 0.26 a   | 0.58 a   | 66.94 a  | 0.25 b   | 0.6 a      | 16.94 b    |
|          | ± 187.35   | ± 784.96    | ± 764.75   | ± 1,886.43   | ± 5,772.34  | ± 2,352.51  | ± 0.17   | ± 0.22   | ± 27.01  | ± 0.01   | ± 0.21     | ± 12.64    |
| BRS2299  | 2,206.25 a | 2,448.50 a  | 1,906.27 a | 13,414.25 a  | 12,910.75 a | 3,824.84 a  | 0.00 a   | 0.53 a   | 78.11 a  | 0.26 b   | 0.26 a     | 11.22 b    |
|          | ± 723.27   | ± 643.47    | ± 1,522.72 | ± 6,185.19   | ± 4,435.85  | ± 3,289.63  | ± 0.01   | ± 0.14   | ± 41.57  | ± 0.24   | ± 0.07     | ± 4.08     |
| BRS3193  | 1,511.75 a | 1,926.50 a  | 2,220.55 a | 9,273.75 a   | 13,490.00 a | 3,179.96 a  | 0.19 a   | 0.47 a   | 94.05 a  | 0.32 b   | 0.11 a     | 22.18 b    |
|          | ± 273.14   | ± 586.28    | ± 1,429.27 | ± 3,540.44   | ± 3,392.41  | ± 4,128.86  | ± 0.26   | ± 0.10   | ± 55.58  | ± 0.18   | ± 0.02     | ± 16.56    |
| Clone 12 | 2,866.00 a | 2,459.75 a  | 2,078.22 a | 16,155.00 a  | 12,797.00 a | 2,090.25 a  | 0.00 a   | 291.33 a | 112.30 a | 0.35 b   | 0.45 a     | 32.93 b    |
|          | ± 997.44   | ± 577.33    | ± 1,053.25 | ± 6,693.41   | ± 3,371.48  | ± 4,152.51  | ± 0.01   | ± 581.11 | ± 33.72  | ± 0.12   | ± 0.18     | ± 28.79    |
| BRS2357  | 2,065.75 a | 2,085.00 a  | 1,123.37 a | 13,459.00 a  | 10,187.50 a | 2,449. 79 a | 0.14 a   | 0.68 a   | 65.81 a  | 0.24 b   | 0.44 a     | 16.55 b    |
|          | ± 738.81   | ± 507.14    | ± 612.12   | ± 5,786.39   | ± 2,642.31  | ± 3,166.04  | ± 0.29   | ± 0.15   | ± 14.01  | ± 0.10   | ± 0.22     | ± 6.49     |
| RO_C125  | 2,578.25 a | 2,552.75 a  | 1,655.57 a | 14,405.50 a  | 18,992.50 a | 2,275.82 a  | 0.31 a   | 0.52 a   | 72.12 a  | 0.44 b   | 0.44 a     | 23.75 b    |
|          | ± 1,092.72 | ± 1,034.73  | ± 1,338.32 | ± 6,256.34   | ± 15,010.51 | ± 4,541.45  | ± 0.40   | ± 0.27   | ± 56.12  | ± 0.17   | ± 0.27     | ± 15.07    |
| RO_C160  | 2,285.00 a | 2,730. 00 a | 1,216.45 a | 13,378.50 a  | 13,385.50 a | 4,234.20a   | 0.29 a   | 316.29 a | 57.13 a  | 0.15 b   | 270.09 a   | 14.33 b    |
|          | ± 836.36   | ± 1,064.12  | ± 366.00   | ± 5,310.83   | ± 6,679.05  | ± 2,954.31  | ± 0.20   | ± 630.47 | ± 32.18  | ± 0.04   | ± 538.61   | ± 5.66     |
| Clone 9  | 2,254.00 a | 3,075.75 a  | 1,477.75 a | 12,895.00 a  | 9,173.75 a  | 2,128.21 a  | 0.06 a   | 2.09 a   | 71.12 a  | 0.16 b   | 372.86 a   | 16.73 b    |
|          | ± 1,174.95 | ± 2,125.43  | ± 691.06   | ± 4,182.7    | ± 2,967.19  | ± 2,486.80  | ± 0.13   | ± 3.25   | ± 30.71  | ± 0.01   | ± 742.76   | ± 8.00     |

|          |            |            |            |             |             |            |        |          |         |        |          |            |
|----------|------------|------------|------------|-------------|-------------|------------|--------|----------|---------|--------|----------|------------|
| Clone 15 | 2,988.00 a | 2,652.00 a | 1,661.75 a | 15,602.50 a | 10,543.50 a | 2,067.53 a | 0.06 a | 277.14 a | 57.27 a | 0.13 b | 276.75 a | 1,966.91 a |
|          | ± 1,091.17 | ± 779.76   | ± 443.62   | ± 9,823.72  | ± 3,043.61  | ± 2,426.24 | ± 0.12 | ± 549.24 | ± 7.47  | ± 0.04 | ± 550.83 | ± 3,903.4  |

Means followed by the same letters constitute a statistically homogeneous group, at 5% probability.

Continuation...

| Clones   | Zinc       | Bromine    | Rubidium   | Strontium  | Yttrium    | Hafnium    | Iodine   | Grain yield | Productivity |
|----------|------------|------------|------------|------------|------------|------------|----------|-------------|--------------|
| BRS3137  | 17.49 a    | 12.13 a    | 22.40 b    | 28.77 a    | 1,032.84 a | 3.82 b     | 719.10 a | 0,285 c     | 29,32 c      |
|          | ± 8.18     | ± 18.05    | ± 17.81    | ± 9.90     | ± 2,057.44 | ± 1.34     | ± 331.42 | ± 0.01      | ± 5.38       |
| BRS3213  | 18.10 a    | 20.75 a    | 23.68 b    | 17.04 a    | 10.045 a   | 3.75 b     | 47.10 c  | 0,200 c     | 30,77 c      |
|          | ± 2.94     | ± 10.46    | ± 27.59    | ± 9.99     | ± 9.22     | ± 1.88     | ± 60.13  | ± 0.04      | ± 7.26       |
| BRS1216  | 26.73 a    | 16.14 a    | 25.06 b    | 14.76 a    | 1,505.33 a | 1,187.72 b | 198.61 c | 0,288 a     | 116,53 a     |
|          | ± 14.89    | ± 17.17    | ± 25.54    | ± 4.30     | ± 3,003.11 | ± 1,368.94 | ± 369.66 | ± 0.03      | ± 25.94      |
| BRS2314  | 14.85 a    | 9.01 a     | 2,294.11 b | 17.33 a    | 811.67 a   | 1,081.73 b | 48.92 c  | 0,303 b     | 75,32 b      |
|          | ± 13.26    | ± 1.64     | ± 4,569.93 | ± 8.93     | ± 1,616.88 | ± 2,154.84 | ± 63.51  | ± 0.08      | ± 20.00      |
| BRS3210  | 2,208.56 a | 865.75 a   | 25.41 b    | 52.03 a    | 1,703.43 a | 1,373.30 b | 30.56 c  | 0,253 c     | 32,04 c      |
|          | ± 4,356.38 | ± 1713.50  | ± 12.82    | ± 63.84    | ± 2,119.44 | ± 1,604.54 | ± 54.14  | ± 0.03      | ± 5.24       |
| BRS3220  | 3,432.96 a | 268.16 a   | 6,438.32 a | 1,818.81 a | 2,078.39 a | 4,666.50 a | 312.55 b | 0,228 c     | 42,83 c      |
|          | ± 3,951.51 | ± 517.90   | ± 4,377.01 | ± 3,573.5  | ± 1,472.11 | ± 2,232.85 | ± 429.68 | ± 0.01      | ± 17.68      |
| BRS2336  | 12.46 a    | 462.93 a   | 5,534.25 a | 22.49 a    | 2,713.50 a | 3,959.25 a | 356.86 b | 0,243 b     | 69,91 b      |
|          | ± 4.33     | ± 914.05   | ± 1,126.29 | ± 10.71    | ± 940.06   | ± 1,708.77 | ± 56.15  | ± 0.02      | ± 10.38      |
| BRS2299  | 1,404.15 a | 2,347.67 a | 6,102.00 a | 21.33 a    | 2,221.50 a | 1,406.07 b | 241.37 b | 0,278 b     | 89,74 b      |
|          | ± 2,787.24 | ± 4,654.22 | ± 750.97   | ± 7.23     | ± 505.89   | ± 1,625.89 | ± 131.62 | ± 0.05      | ± 37.52      |
| BRS3193  | 12.34 a    | 691.44 a   | 2,958.33 b | 25.52 a    | 3,804.00 a | 2,701.50 a | 41.95 c  | 0,253 c     | 48,43 c      |
|          | ± 5.85     | ± 803.10   | ± 2,364.99 | ± 6.53     | ± 2,822.77 | ± 191.82   | ± 83.9   | ± 0.02      | ± 8.85       |
| Clone 12 | 2,404.52 a | 3,016.93 a | 1,036.14 b | 21.50 a    | 2,616.27 a | 1,841.19 b | 24.39 c  | 0,208 c     | 31,98 c      |
|          | ± 4,725.67 | ± 4,399.66 | ± 2,045.92 | ± 5.07     | ± 1,754.71 | ± 1,281.70 | ± 48.78  | ± 0.08      | ± 21.44      |
| BRS2357  | 2,256.34 a | 3.97 a     | 5,161.86 a | 18.17 a    | 1,920.03 a | 3,068.22 a | 0.00 c   | 0,300 a     | 102,12 a     |
|          | ± 4,490.04 | ± 4.70     | ± 4,240.70 | ± 6.36     | ± 1,314.35 | ± 2,297.74 | ± 0.01   | ± 0.01      | ± 14.68      |
| RO_C125  | 2,111.93 a | 2,673.83 a | 5,984.23 a | 1,823.67 a | 2,877.50 a | 4,881.25 a | 45.65 c  | 0,293 c     | 64,25 c      |
|          | ± 4,190.72 | ± 2,335.06 | ± 4,257.74 | ± 3,546.92 | ± 412.83   | ± 2,302.35 | ± 91.30  | ± 0.01      | ± 11.77      |
| RO_C160  | 2,092.92 a | 1,647.95 a | 4,673.47 a | 2,123.82 a | 2,829.52 a | 3,061.25 a | 0.00 c   | 0,300 a     | 111,71 a     |
|          | ± 4,159.39 | ± 1,106.89 | ± 4,650.24 | ± 4,188.79 | ± 2,078.93 | ± 513.77   | ± 0.01   | ± 0.03      | ± 24.88      |
| Clone 9  | 2,158.18 a | 1,989.38 a | 2,870.06 b | 17.86 a    | 1,377.98 a | 2,767.00 a | 349.13 b | 0,270 a     | 99,53 a      |

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|          |                |                |                |            |                |                |            |            |             |
|----------|----------------|----------------|----------------|------------|----------------|----------------|------------|------------|-------------|
|          | $\pm 4,285.89$ | $\pm 2,172.74$ | $\pm 2,427.52$ | $\pm 1.05$ | $\pm 1,620.48$ | $\pm 618.39$   | 303.30     | $\pm 0.02$ | $\pm 7.99$  |
| Clone 15 | 3,187.71 a     | 2,032.90 a     | 428.18 b       | 18.98 a    | 3,014.25 a     | 2,826.27 a     | 0.00 c     | 0,263 b    | 81,45 b     |
|          | $\pm 3,856.10$ | $\pm 2,937.97$ | $\pm 828.55$   | $\pm 4.74$ | $\pm 735.54$   | $\pm 1,977.89$ | $\pm 0.01$ | $\pm 0.03$ | $\pm 14.38$ |

Means followed by the same letters constitute a statistically homogeneous group, at 5% probability.