

Data set Table: The triplicate measurement of physicochemical and nutraceutical values of analyzed samples.

| S/n | Location | Var | strt | FT | Triplicate | Protein | Fat | Fiber | Mc (db) | CHO | Energy | pH | TA | Ash |
|-----|----------|-----|------|----|------------|---------|------|-------|---------|--------|---------|------|--------|------|
| 1 | L1 | V1 | S1 | F0 | 1 | 3.36 | 1.49 | 9.93 | 8.835 | 74.005 | 322.87 | 4.5 | 0.13 | 2.38 |
| 2 | L1 | V1 | S1 | F0 | 2 | 3.38 | 1.55 | 9.94 | 8.656 | 74.064 | 323.726 | 4.5 | 0.13 | 2.41 |
| 3 | L1 | V1 | S1 | F0 | 3 | 3.4 | 1.61 | 9.95 | 8.682 | 73.918 | 323.762 | 4.5 | 0.13 | 2.44 |
| 4 | L1 | V1 | S1 | F2 | 1 | 3.95 | 1.19 | 5.55 | 6.129 | 80.011 | 346.554 | 3.8 | 0.272 | 3.17 |
| 5 | L1 | V1 | S1 | F2 | 2 | 4.06 | 1.2 | 5.97 | 6.642 | 78.948 | 342.832 | 3.8 | 0.78 | 3.18 |
| 6 | L1 | V1 | S1 | F2 | 3 | 4.15 | 1.21 | 6.39 | 6.834 | 78.226 | 340.394 | 3.8 | 0.84 | 3.19 |
| 7 | L1 | V1 | S1 | F4 | 1 | 5.9 | 0.61 | 2.93 | 5.893 | 81.117 | 353.558 | 3 | 0.517 | 3.55 |
| 8 | L1 | V1 | S1 | F4 | 2 | 5.97 | 0.62 | 3.37 | 5.961 | 80.509 | 351.496 | 3 | 0.559 | 3.57 |
| 9 | L1 | V1 | S1 | F4 | 3 | 6.04 | 0.63 | 3.81 | 5.028 | 80.902 | 353.438 | 3 | 0.601 | 3.59 |
| 10 | L1 | V1 | S2 | F0 | 1 | 2.7 | 1.42 | 9.37 | 6.268 | 77.902 | 335.188 | 4.9 | 0.1129 | 2.34 |
| 11 | L1 | V1 | S2 | F0 | 2 | 3.32 | 1.57 | 9.53 | 6.352 | 76.878 | 334.922 | 4.9 | 0.1199 | 2.35 |
| 12 | L1 | V1 | S2 | F0 | 3 | 3.37 | 1.72 | 9.69 | 6.296 | 76.564 | 335.216 | 4.9 | 0.1269 | 2.36 |
| 13 | L1 | V1 | S2 | F2 | 1 | 3.63 | 1.31 | 6.18 | 5.834 | 80.266 | 347.374 | 4.2 | 0.256 | 2.78 |
| 14 | L1 | V1 | S2 | F2 | 2 | 3.7 | 1.32 | 6.28 | 5.627 | 80.273 | 347.772 | 4.21 | 0.271 | 2.8 |
| 15 | L1 | V1 | S2 | F2 | 3 | 3.77 | 1.33 | 6.36 | 5.931 | 79.789 | 346.206 | 4.22 | 0.286 | 2.82 |
| 16 | L1 | V1 | S2 | F4 | 1 | 4.87 | 0.67 | 4.04 | 4.726 | 82.374 | 355.006 | 3.44 | 0.402 | 3.32 |
| 17 | L1 | V1 | S2 | F4 | 2 | 5.15 | 0.68 | 4.11 | 4.528 | 82.202 | 355.528 | 3.54 | 0.408 | 3.33 |
| 18 | L1 | V1 | S2 | F4 | 3 | 5.43 | 0.69 | 4.18 | 4.83 | 81.53 | 354.05 | 3.64 | 0.414 | 3.34 |
| 19 | L1 | V2 | S1 | F0 | 1 | 3.04 | 1.24 | 7.67 | 7.228 | 78.762 | 338.368 | 5.3 | 0.121 | 2.06 |
| 20 | L1 | V2 | S1 | F0 | 2 | 3.14 | 1.26 | 7.84 | 7.351 | 78.339 | 337.256 | 5.4 | 0.124 | 2.07 |
| 21 | L1 | V2 | S1 | F0 | 3 | 3.24 | 1.28 | 8.01 | 7.392 | 77.998 | 336.472 | 5.5 | 0.127 | 2.08 |
| 22 | L1 | V2 | S1 | F2 | 1 | 3.32 | 0.59 | 5.53 | 5.94 | 81.49 | 344.55 | 3.9 | 0.26 | 3.13 |
| 23 | L1 | V2 | S1 | F2 | 2 | 3.46 | 0.62 | 5.78 | 5.826 | 81.174 | 344.116 | 3.9 | 0.27 | 3.14 |
| 24 | L1 | V2 | S1 | F2 | 3 | 3.6 | 0.65 | 6.03 | 5.859 | 80.711 | 343.094 | 3.9 | 0.28 | 3.15 |
| 25 | L1 | V2 | S1 | F4 | 1 | 5.39 | 0.28 | 2.21 | 4.862 | 83.938 | 359.832 | 3.2 | 0.447 | 3.32 |
| 26 | L1 | V2 | S1 | F4 | 2 | 5.41 | 0.31 | 2.22 | 4.381 | 84.349 | 361.826 | 3.2 | 0.562 | 3.33 |
| 27 | L1 | V2 | S1 | F4 | 3 | 5.43 | 0.34 | 2.23 | 4.793 | 83.867 | 360.248 | 3.2 | 0.677 | 3.34 |
| 28 | L1 | V2 | S2 | F0 | 1 | 3 | 1.07 | 7.06 | 5.262 | 81.568 | 347.902 | 6.5 | 0.104 | 2.04 |
| 29 | L1 | V2 | S2 | F0 | 2 | 3.09 | 1.09 | 7.08 | 5.688 | 80.982 | 346.098 | 6.5 | 0.113 | 2.07 |
| 30 | L1 | V2 | S2 | F0 | 3 | 3.18 | 1.11 | 7.1 | 5.372 | 81.138 | 347.262 | 6.5 | 0.122 | 2.1 |
| 31 | L1 | V2 | S2 | F2 | 1 | 3.18 | 0.96 | 6.43 | 4.238 | 82.432 | 351.088 | 4.3 | 0.23 | 2.76 |
| 32 | L1 | V2 | S2 | F2 | 2 | 3.35 | 1.08 | 7.35 | 4.319 | 81.121 | 347.604 | 4.31 | 0.24 | 2.78 |
| 33 | L1 | V2 | S2 | F2 | 3 | 3.52 | 1.2 | 8.27 | 4.397 | 79.813 | 344.132 | 4.32 | 0.25 | 2.8 |
| 34 | L1 | V2 | S2 | F4 | 1 | 4.8 | 0.49 | 3.46 | 2.985 | 85.045 | 363.79 | 3.6 | 0.34 | 3.22 |
| 35 | L1 | V2 | S2 | F4 | 2 | 4.92 | 0.51 | 3.48 | 2.824 | 85.036 | 364.414 | 3.6 | 0.34 | 3.23 |
| 36 | L1 | V2 | S2 | F4 | 3 | 5.04 | 0.53 | 3.5 | 2.625 | 85.065 | 365.19 | 3.6 | 0.34 | 3.24 |
| 37 | L2 | V1 | S1 | F0 | 1 | 3.84 | 1.69 | 11.63 | 9.165 | 71.225 | 315.47 | 4.14 | 0.08 | 2.45 |
| 38 | L2 | V1 | S1 | F0 | 2 | 4.01 | 1.69 | 11.63 | 9.537 | 70.673 | 313.942 | 4.15 | 0.08 | 2.46 |
| 39 | L2 | V1 | S1 | F0 | 3 | 4.18 | 1.69 | 11.63 | 9.317 | 70.713 | 314.782 | 4.16 | 0.08 | 2.47 |

NOTE:

Mc (db): Moisture content (dry basis)

CHO: Carbohydrates

TA: Titrable acidity

Location (place name):

L1 - Disa Kera

L2 - Koysa Gorta

Var (Variety of kocho sample):

V1 - Meazia

V2 - Katania

Strt. (Starter culture gamma):

S1 - with gamma

S2 - without gamma

FT (Fermentation time)

F0 - non-fermented kocho (initial)

F2 - 2 months fermented kocho

F4 - 4 months fermented kocho

| | | | | | | | | | | | | | | |
|----|----|----|----|----|---|------|------|-------|-------|--------|---------|------|-------|------|
| 40 | L2 | V1 | S1 | F2 | 1 | 3.88 | 1.34 | 8.68 | 7.382 | 75.338 | 328.932 | 3.6 | 0.25 | 3.38 |
| 41 | L2 | V1 | S1 | F2 | 2 | 4.01 | 1.35 | 8.88 | 7.53 | 74.84 | 327.55 | 3.61 | 0.26 | 3.39 |
| 42 | L2 | V1 | S1 | F2 | 3 | 4.14 | 1.36 | 9.08 | 7.526 | 74.494 | 326.776 | 3.62 | 0.27 | 3.4 |
| 43 | L2 | V1 | S1 | F4 | 1 | 5.47 | 0.74 | 5.61 | 5.387 | 79.323 | 345.832 | 3.2 | 0.33 | 3.47 |
| 44 | L2 | V1 | S1 | F4 | 2 | 5.54 | 0.8 | 5.76 | 5.138 | 79.272 | 346.448 | 3.2 | 0.35 | 3.49 |
| 45 | L2 | V1 | S1 | F4 | 3 | 5.61 | 0.86 | 5.91 | 5.48 | 78.63 | 344.7 | 3.2 | 0.37 | 3.51 |
| 46 | L2 | V1 | S2 | F0 | 1 | 3.36 | 1.21 | 11.29 | 8.356 | 73.354 | 317.746 | 4.68 | 0.06 | 2.43 |
| 47 | L2 | V1 | S2 | F0 | 2 | 3.5 | 1.26 | 11.3 | 8.821 | 72.679 | 316.056 | 4.7 | 0.06 | 2.44 |
| 48 | L2 | V1 | S2 | F0 | 3 | 3.64 | 1.31 | 11.31 | 8.691 | 72.599 | 316.746 | 4.72 | 0.06 | 2.45 |
| 49 | L2 | V1 | S2 | F2 | 1 | 3.61 | 0.93 | 10.2 | 7.244 | 75.096 | 323.194 | 3.9 | 0.162 | 2.92 |
| 50 | L2 | V1 | S2 | F2 | 2 | 3.79 | 0.97 | 10.28 | 7.183 | 74.837 | 323.238 | 3.9 | 0.168 | 2.94 |
| 51 | L2 | V1 | S2 | F2 | 3 | 3.97 | 1.01 | 10.36 | 7.457 | 74.243 | 321.942 | 3.9 | 0.174 | 2.96 |
| 52 | L2 | V1 | S2 | F4 | 1 | 4.49 | 0.74 | 5.79 | 6.47 | 79.05 | 340.82 | 3.4 | 0.3 | 3.46 |
| 53 | L2 | V1 | S2 | F4 | 2 | 4.52 | 0.77 | 5.82 | 6.13 | 79.28 | 342.13 | 3.4 | 0.32 | 3.48 |
| 54 | L2 | V1 | S2 | F4 | 3 | 4.55 | 0.8 | 5.85 | 6.518 | 78.782 | 340.528 | 3.4 | 0.34 | 3.5 |
| 55 | L2 | V2 | S1 | F0 | 1 | 2.99 | 1.42 | 9.77 | 8.26 | 75.16 | 325.38 | 4.5 | 0.08 | 2.4 |
| 56 | L2 | V2 | S1 | F0 | 2 | 3.15 | 1.42 | 9.95 | 8.417 | 74.653 | 323.992 | 4.51 | 0.08 | 2.41 |
| 57 | L2 | V2 | S1 | F0 | 3 | 3.31 | 1.42 | 10.13 | 8.538 | 74.182 | 322.748 | 4.52 | 0.08 | 2.42 |
| 58 | L2 | V2 | S1 | F2 | 1 | 3.7 | 1.27 | 5.53 | 6.772 | 79.458 | 344.062 | 3.8 | 0.24 | 3.27 |
| 59 | L2 | V2 | S1 | F2 | 2 | 3.77 | 1.32 | 5.78 | 6.524 | 79.606 | 345.384 | 3.8 | 0.25 | 3 |
| 60 | L2 | V2 | S1 | F2 | 3 | 3.84 | 1.37 | 6.03 | 6.53 | 79.2 | 344.49 | 3.8 | 0.26 | 3.03 |
| 61 | L2 | V2 | S1 | F4 | 1 | 5.01 | 0.53 | 5.27 | 4.849 | 81.161 | 349.454 | 3.5 | 0.3 | 3.18 |
| 62 | L2 | V2 | S1 | F4 | 2 | 5.14 | 0.55 | 5.3 | 4.792 | 81.008 | 349.542 | 3.5 | 0.31 | 3.21 |
| 63 | L2 | V2 | S1 | F4 | 3 | 5.27 | 0.57 | 5.33 | 4.582 | 81.008 | 350.242 | 3.5 | 0.32 | 3.24 |
| 64 | L2 | V2 | S2 | F0 | 1 | 2.79 | 0.99 | 8.72 | 7.518 | 77.752 | 331.078 | 4.8 | 0.043 | 2.23 |
| 65 | L2 | V2 | S2 | F0 | 2 | 3.02 | 1.06 | 8.76 | 7.628 | 77.292 | 330.788 | 4.8 | 0.048 | 2.24 |
| 66 | L2 | V2 | S2 | F0 | 3 | 3.25 | 1.13 | 8.8 | 7.32 | 77.25 | 332.17 | 4.8 | 0.53 | 2.25 |
| 67 | L2 | V2 | S2 | F2 | 1 | 3.52 | 0.62 | 7.46 | 5.841 | 79.729 | 338.576 | 4 | 0.15 | 2.83 |
| 68 | L2 | V2 | S2 | F2 | 2 | 3.54 | 0.65 | 7.48 | 5.619 | 79.861 | 339.454 | 4 | 0.16 | 2.85 |
| 69 | L2 | V2 | S2 | F2 | 3 | 3.56 | 0.68 | 7.5 | 5.527 | 79.863 | 339.812 | 4 | 0.17 | 2.87 |
| 70 | L2 | V2 | S2 | F4 | 1 | 4.33 | 0.56 | 5.51 | 3.286 | 83.344 | 355.736 | 3.6 | 0.26 | 2.97 |
| 71 | L2 | V2 | S2 | F4 | 2 | 4.39 | 0.58 | 5.77 | 3.489 | 82.781 | 353.904 | 3.6 | 0.26 | 2.99 |
| 72 | L2 | V2 | S2 | F4 | 3 | 4.45 | 0.6 | 5.83 | 3.575 | 82.535 | 353.34 | 3.6 | 0.26 | 3.01 |