**Supplementary Table S1.** Ingredients and chemical composition of experimental concentrates and fescue hay.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Item** | **Treatmenta** | | | | **Fescue hay** | **SCG** |
|  | **Control** | **3** | **5** | **10** |  |  |
| *Ingredients (g/kg DM)* |  |  |  |  |  |  |
| Barley | 200 | 250 | 250 | 250 | — |  |
| Oats | 300 | 170 | 150 | 50 | — |  |
| Corn | 170 | 220 | 220 | 270 | — |  |
| Rapeseed meal | 150 | 150 | 150 | 150 | — |  |
| Hydrogenated palm fat | 20 | 20 | 20 | 20 | — |  |
| Molasses | 30 | 30 | 30 | 30 | — |  |
| Vitamin-mineral premix | 30 | 30 | 30 | 30 | — |  |
| DDGs | 100 | 100 | 100 | 100 | — |  |
| Coffee grounds | 0 | 30 | 50 | 100 | — |  |
| *Chemical composition (g/kg DM)* |  |  |  |  |  |  |
| Dry matter | 894 | 912 | 896 | 909 | 943 |  |
| Organic matter | 936 | 943 | 937 | 940 | — | 985 |
| Crude protein | 161 | 165 | 167 | 170 | 123 | 125 |
| NDF | 257 | 217 | 227 | 213 | 468 | 730 |
| ADF | 115 | 96 | 100 | 97 | 231 | 480 |
| Fat | 78 | 77 | 75 | 74 | — | 164 |
| Starch | 333 | 370 | 354 | 355 | — | 30 |
| Caffeine (mg/kg DM) | 0 | 50 | 96 | 120 | — |  |
| GAE(mg/g DM) | 0 | 3.7 | 3.8 | 4.0 | — |  |
| Melanoidins (g/100g DM) | 0 | 3.5 | 3.7 | 4.2 | — |  |
| UFL | 1.0 | 1.0 | 1.0 | 1.0 | — |  |

aControl concentrate; 3, 5 and 10, treatment groups supplemented with 30 g/kg, 50g/kg and 100 g/kg of spent coffee grounds in the concentrate, respectively; SCG= spent coffee ground; DM= dry matter; DDGs: distillers dried grains with solubles; NDF= neutral detergent fiber; ADF= acid detergent fiber; GAE= gallic acid equivalents; UFL= feed units for lactation