Supplementary Material

[Silage additives](javascript:;) improve fermentation quality, aerobic stability and rumen degradation in mixed silage composed of amaranth and corn straw

Jian Ma1†, Xue Fan1,2†, Zhuang Ma2, Xiuwen Huang2, Minghuan Tang2, Fuquan Yin1, Zhihui Zhao1, Shangquan Gan1\*

**\* Correspondence:** Shangquan Gan: gansq1977@126.com

# Supplementary Tables

Table S1Chemical composition of amaranth and corn [straw](javascript:;) (DM basis, %).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Items | DM | CP | OM | WSC | NDF | ADF |
| Amaranth | 19.15 | 10.38 | 87.16 | 4.17 | 56.58 | 38.57 |
| Corn straw | 90.43 | 7.18 | 90.55 | 3.71 | 70.59 | 41.69 |

DM, dry matter; CP, crude protein; OM, [organic](E:/%E6%9C%89%E9%81%93/Dict/8.5.1.0/resultui/html/index.html" \l "/javascript:;) [matter](E:/%E6%9C%89%E9%81%93/Dict/8.5.1.0/resultui/html/index.html" \l "/javascript:;); WSC, [water soluble carbohydrate](javascript:;); NDF, neutral detergent fiber; ADF, acid detergent fiber.

Table S2Feed ingredients and nutrient composition of experimental diet (DM basis).

|  |  |  |  |
| --- | --- | --- | --- |
| Ingredients, % |  | Nutrient levels, % |  |
| Alfalfa hay | 10.28 | NEL2), MJ/kg | 5.11 |
| Chinese wildrye | 14.40 | CP | 12.86 |
| Whole corn silage | 21.92 | NDF | 45.37 |
| Amaranth silage | 13.40 | ADF | 30.26 |
| Steam-flaked corn | 15.32 | EE | 2.51 |
| Soybean meal | 6.48 | Ca | 0.67 |
| [Cottonseed](E:/%E6%9C%89%E9%81%93/Dict/8.9.4.0/resultui/html/index.html" \l "/javascript:;) [meal](E:/%E6%9C%89%E9%81%93/Dict/8.9.4.0/resultui/html/index.html" \l "/javascript:;) | 4.44 | P | 0.38 |
| Wheat bran | 6.75 |  |  |
| DDGS | 4.66 |  |  |
| Limestone | 0.80 |  |  |
| NaCl | 0.38 |  |  |
| NaHCO3 | 0.75 |  |  |
| Premix1) | 0.42 |  |  |

DM, dry matter; DDGS, distillers dried grains with soluble; NEL, net energy for lactation; CP, crude protein; NDF, neutral detergent fiber; ADF, acid detergent fiber; EE, Ether extract.

1) The premix provided the following per kilogram of the diet: VA 800 000 IU, VD1 200 IU, VE 50 IU, Fe, 100 mg, Zn 60 mg, Mn 40 mg, Cu 10 mg, I 0.50 mg, Se 0.30 mg, Co 0.10 mg.

2) NEL was a calculated value, while others were measured values.