**Table 7**. Rumen microbiota (% of total archaea or total bacteria) in lactating Jersey dairy cows fed incremental amounts of kelp meal or monensin (MON)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Kelp meal | | | |  |  |  | Contrasts (*P*-values)1 | | | |
| Item | 0 g | 57 g | 113 g | 170 g |  | MON | SEM | Linear | Quadratic | Kelp vs. MON | 170 g Kelp vs. MON |
| *Methanobrevibacter sp.* | 89.7 | 86.1 | 86.9 | 85.2 |  | 90.3 | 1.57 | 0.04 | 0.47 | 0.01 | 0.01 |
| *Prevotella ruminicola* | 7.17 | 6.55 | 6.34 | 6.45 |  | 7.07 | 0.36 | 0.15 | 0.32 | 0.15 | 0.24 |
| *Clostridium spp.* | 4.16 | 4.22 | 4.67 | 4.75 |  | 4.59 | 0.21 | 0.01 | 0.95 | 0.86 | 0.53 |
| *Eubacterium spp.* | 4.03 | 4.04 | 5.19 | 4.04 |  | 3.36 | 0.52 | 0.57 | 0.22 | 0.06 | 0.31 |
| *Bacteroides spp.* | 3.32 | 3.33 | 3.02 | 3.26 |  | 3.27 | 0.13 | 0.31 | 0.30 | 0.62 | 0.96 |
| *Ruminococcus bromii* | 3.28 | 3.33 | 3.16 | 3.74 |  | 3.98 | 0.51 | 0.52 | 0.53 | 0.25 | 0.69 |
| *Fibrobacter succinogenes* | 2.20 | 1.97 | 2.15 | 1.90 |  | 1.91 | 0.31 | 0.45 | 0.98 | 0.68 | 0.99 |
| *Ruminococcus flavefaciens* | 1.46 | 1.37 | 1.64 | 1.63 |  | 1.54 | 0.19 | 0.11 | 0.73 | 0.96 | 0.56 |

1Linear and quadratic effects of incremental amounts of kelp meal (0, 57, 113, and 170 g/d); Kelp vs. MON = mean of the 3 kelp meal treatments vs. the mean of the MON treatment; 170 g Kelp vs. MON = mean of the treatment consisting of 170 g of kelp meal vs. MON treatment.