A survey was carried out on management practices, diet charac­teristics, milk yield, and fatty acid profile in buffalo farming. Thirty-nine farms (about 3% of the buffalo farms of Campania Region) were voluntarily enrolled in the study. To be eligible to be included, the farms need to use the same total mixed ration (TMR) for all lactating cows. Each farm was visited twice, at least 10 days apart, to record management practices, ration composi­tion, and milk yield along with sampling TMR and milk. Chemical composition, in vitro digestibility of DM (IVDMD) and NDF (IVNDFD) based on a 48-h incubation in a Daisy II system, and particle size distribution by means of the Penn State Forage Particle Separator were determined for TMR. Milk samples were analyzed for fat and protein (Milkoscan 605), somatic cell count (SCC-Fossomatic250), and fatty acid (FA) composition by trans-esterification reaction using capillary gas chromatography. Descriptive statistics, Pearson’s correlation and linear regression analyses were performed by using SAS statistical package. Herds averaged 136 ± 73 lactating buffaloes producing about 8.6 ± 1.7 kg at 8.45 ± 0.47% fat, 4.72 ± 0.37% protein, SCC 265.16 ± 150.81\*103. Most of the farms used a combination of hays, silages, and con­centrates while only 6 on them did not use ensiled forages. A larger variability was observed for ration characteristics. The TMR averaged 51.9 ± 8.5% DM, crude protein 13.9 ± 1.9% DM, and NDF 57.3 ± 5.4% DM. Particle size analysis showed that 45.6% of the TMR was retained on the 19-mm sieve (range 12.3–78.7%), 20.4% on the 8-mm sieve (2.4–50.5%), 10.4% on the 4-mm sieve (3.2–20.7%), and 23.0% on the bottom pan (5.4–22.7%). Weak relationships were found between particle size and milk yield and TMR composition, while IVNDFD was positively related to milk fat (*R*2 0.75, *p* < .001). Saturated FA averaged 70.3 ± 3.8, mono­unsaturated FA 26.1 ± 1.3, and polyunsaturated FA 3.6 ± 0.5, data in line with previous reports. Weak relationships were found between TMR composition, TMR particle size and FA composition of milk fat. Overall, the survey highlighted that TMR particles larger than 19 mm were dramatically higher than the recom­mended values for lactating cows. Nevertheless, the low incidence of metabolic disorders and the satisfactory milk yield suggests the need of establishing particle size ranges of TMR specific for buffaloes.

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