IMPACT OF INCLUSION OF SUGAR BEET PULP THROUGH DIFFERENT FORMS IN DAIRY GOATS DIETS

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OBJECTIVE

To secure the intensification of goat dairy production by using dehydrated sugar beet pulp and to test a new presentation in form of « shreds ».

MATERIAL AND METHOD

3 lots of 45 goats (Alpine, Saanen and mixed breeds) bred in long lactation and split in groups according to their production performances in full lactation.

The **Control** group is compared to 2 other groups in which have been added 600 g of **pelleted** sugar beet pulp (Pulpotop®) or in form of **shreds** (non-pelleted sugar beet pulp).

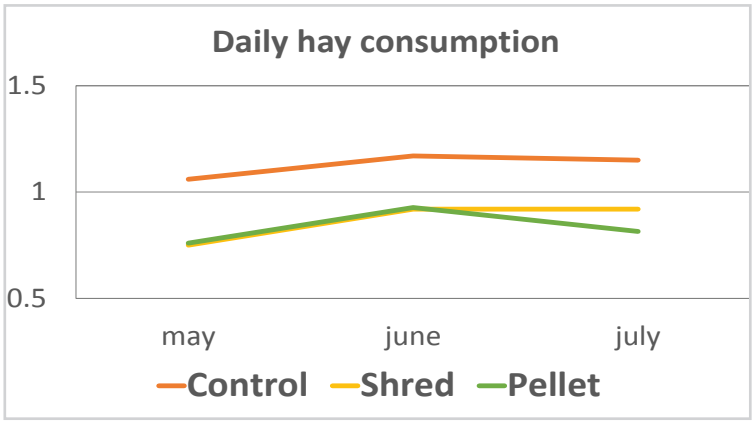
Pelleted sugar beet pulp (Pulpotop®)

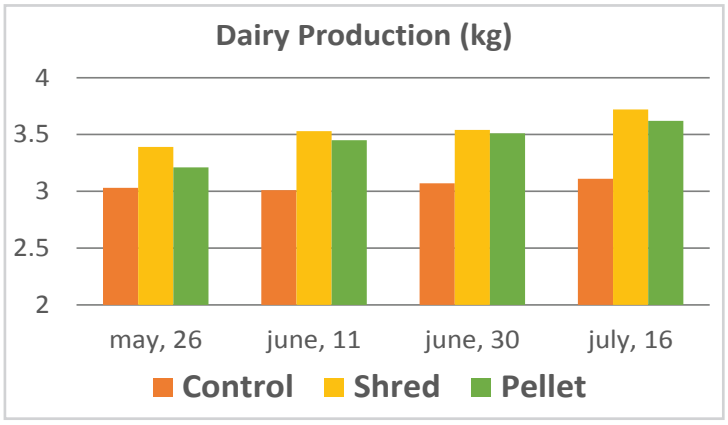
Sugar beet pulp shreds (non-pelleted sugar beet pulp)

The **Control ration** includes ad-libitum alfalfa hay, 520 g corn, 500 g of production feed (19% crude protein), 500 g of fat rich production feed (9% MG) and 300 g of protein concentrate (42% crude protein). Concentrate and corn has been delivered 5 times/day with a feed car.

Sugar beet pulp has been delivered twice a day by hand. The experimental period lasted 8 weeks with pre- and post- experience periods of 3 to 4 weeks.

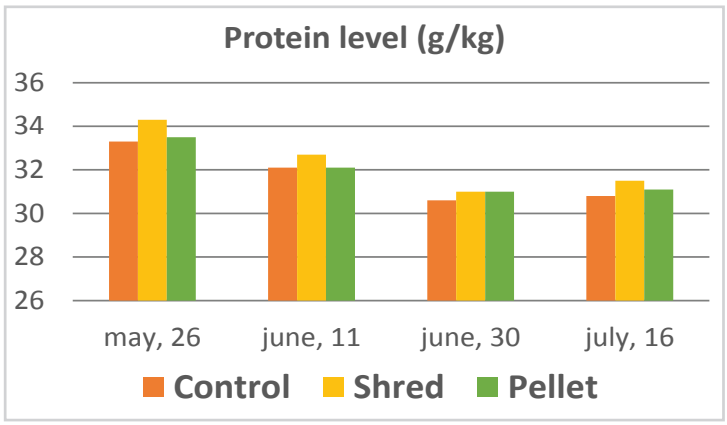
RESULTS

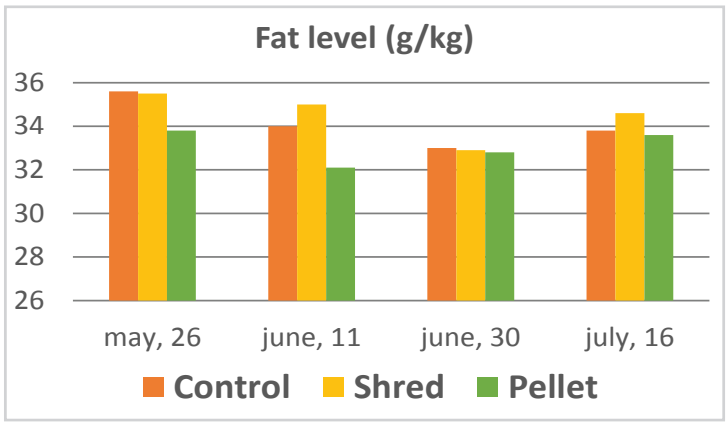




Adding 600 g of sugar beet pulp independently of its form results in a decrease of only 300 g on hay's intake leading to an increase of the goats intake capacity.

This additional intake lead to a very significative increase of the daily dairy production (more than 0.45kg/day for an average production of 3.0 kg/day).





The protein levels stay quite stable leading the « **Pellet** » and « **Shred** » groups to an increase of the protein milk production.

The fat level tends to decline in the « **Pellet** » group while being stable in the « **Control** » and « **Shred** » groups, this would seem to indicate an absence of rumen dysfunction.

The consequence is a huge increase in solid milk production (+ 18%) with the « **Shred** » treatment compared to the **Control**.

CONCLUSION

The use of additional sugar beet pulp in a dairy goat ration allows to increase the dairy production. This increase is securely made if the sugar beet pulp is presented in the form of shreds. The improvement of dairy production with maintaining rates improves the margin over feed.