

## RINGKASAN

REZARKASIH ILHAM RAHMANDANU. Upaya Perbaikan Kualitas Susu Sapi Perah Melalui Pemberian *feed supplement* dalam Pakan Ditinjau dari Kadar Total Solid dan Solid Non Fat, penelitian bertujuan untuk mengkaji level terbaik pemberian *feed supplement* Heit-Chrose pada pakan sapi perah dalam meningkatkan kualitas susu ditinjau dari kadar Total Solid dan Solid Non Fat. Penelitian dilaksanakan di Balai Pembibitan dan Budidaya Ternak Ruminansia Satker Pagerkukuh Wonosobo, sedangkan pengujian mutu susu dilaksanakan di Dinas Pertanian, Pangan, dan Perikanan Wonosobo. Penelitian ini menggunakan metode eksperimental dengan materi penelitian sebanyak 21 ekor periode sapi perah laktasi 2-4. Sampel diambil pada pemerahan pagi hari sebanyak 500 ml . Rancangan penelitian menggunakan Rancangan Pola Tersarang (Nested Clasification) dengan 3 perlakuan dan ulangan 4 kali (grup A) dan 3 kali (grup B). Perlakuan level *feed supplement* Heit-Chrose pada pakan sapi perah adalah R0 = 0% Heit-Chrose, R1 = 1% Heit-Chrose, R2 = 2% Heit-Chrose.

. Rataan *Total Solid* laktasi 2 dengan perlakuan R0, R1 dan R2 adalah  $11.91 \pm 0.29$ ,  $12.16 \pm 0.68$ , dan  $12.09 \pm 0.35$  dan laktasi 4 mendapatkan nilai  $12.39 \pm 0.91$ ,  $11.13 \pm 0.80$  dan  $11.23 \pm 0.50$ . Serta hasil rata-rata nilai *Solid Non Fat* laktasi 2 dengan perlakuan R0, R1 dan R2 adalah  $6.86 \pm 0.15$ ,  $6.90 \pm 0.24$ , dan  $6.70 \pm 0.13$  serta laktasi 4 mendapatkan nilai  $6.70 \pm 0.22$ ,  $6.51 \pm 0.14$ , dan  $6.7 \pm 0.17$ . Hasil penelitian menunjukkan bahwa perlakuan berpengaruh sangat nyata ( $P > 0.01$ ) terhadap *Total Solid* sedangkan *Solid Non Fat*, *Trend Solid Non Fat* dan *Trend Total Solid* tidak berpengaruh nyata ( $P < 0.05$ ) perlakuan berpengaruh sangat. Disimpulkan bahwa suplementasi 2 % Heit Chrose dari total konsentrat mampu meningkatkan nilai Total Solid. Nilai *Solid Non Fat*, trend *Total Solid*, dan trend *Solid Non Fat* belum berpengaruh terhadap pemberian Heit Chrose.

Kata kunci : Sapi Perah, *feed supplement*, Heit Chrose, *Total Solid* , *Solid Non Fat*

## ***SUMMARY***

REZARKASIH ILHAM RAHMANDANU. Improving The Effort of Dairy Cow Milk Quality Through *feed supplement* Addition on The Level of *Total Solid* And *Solid Non Fat* Value. The aim of the research to determine best level additional of *feed supplement* Heit-Chrose in the diet of dairy cattle and its effect on level of *Total Solid* and *Solid Non Fat* value. The research was held in Dairy Cattle Breeding and Livestock Pagerkukuh Wonosobo, while the milk quality testing was carried out in Department of Agriculture, Food, and Fisheries Affairs. The research method was experimental with the material used were 21 dairy cows periods lactacion 2 until 4. The research used a nested clasification design, with three treatments and four replications (Group A) and three replications (Group B) in the diet of dairy cattle were R0 = 0% Heit-Chrose, R1 = 1% Heit-Chrose, R2 = 2% Heit-Chrose

The average value of *Total Solid* lactation 2 with preferential treatment R0, R1, R2, is  $11,91 \pm 0,29$ ,  $12,16 \pm 0,68$ , then lactation 4 as result showed value  $12,39 \pm 0,91$ ,  $11,13 \pm 0,80$  dan  $11,23 \pm 0,50$ . As well as the results of the average value of *Solid Non Fat* lactation 2 with preferential treatment, R0, R1 and R2 is  $6,86 \pm 0,15$ ,  $6,90 \pm 0,24$ , dan  $6,70 \pm 0,13$ , then lactation 4 as result value  $12,39 \pm 0,91$ ,  $11,13 \pm 0,80$  dan  $11,23 \pm 0,50$ . The results showed that treatment there were significant difference ( $P < 0,01$ ) on *Total Solid*, while that *Solid Non Fat*, *Trend Total Solid*, and *Trend Solid Non Fat* showed there were probly not significant ( $P > 0,05$ ). It was concluded *Total Solid* Value was increased on supplementation 2 % Heit Chrose of the total concentrates. The value of *Solid Non Fat*, *Trend Solid Non Fat* and *Trend Total Solid* not significant on supplementation Heit Chrose

Key words: dairy cattle, *feed supplement*, Heit Chrose, *Total Solid*, *Solid Non Fat*