

Effect of Yeast *Saccharomyces cerevisiae* Addition to Lactating Dairy Cows Ration Upon Milk Production and Composition

Title	Effect of Yeast <i>Saccharomyces cerevisiae</i> Addition to Lactating Dairy Cows Ration Upon Milk Production and Composition
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Abstract	<p>Abstract. On farm level, the price of milk is affected by its fat content. On the other hand, improving milk quality by the use of better ration economically is not feasible. The problem is how to find an appropriate, easily found, relatively cheap and efficient ration for producing better quantity and quality of milk. An experimental research was conducted using <i>Saccharomyces cerevisiae</i> yeast in lactating dairy cows ration, in a 4x4 Latin Square Design, with animal trial as column and trial period as row. Each trial period consisted of 14-day preliminary and 7-day trial period (collection period). The treatment to be tested were four levels of yeast addition, namely : 0, 5, 10 and 15 g/cow/day. The variables measured were daily milk production (4% FCM) and milk composition (solid non fat, fat, protein, lactose). The result showed that the addition of yeast had no significant effect on milk production and milk composition, but tended to increase milk fat in which the highest fat content of 5.13 % was achieved when 8.5 g/cow/day was supplemented. The average milk production, solid non fat, lactose, fat, and protein were 9.55 kg/day, 8.70%, 3.99%, 4.50% and 0.13%, respectively. Based on all measured variables, it can be concluded that the addition of yeast <i>Saccharomyces cerevisiae</i> up to 15 g/cow/day to lactating dairy cows ration did not effectively improve milk production and milk composition.</p> <p>Key words: yeast addition, milk production, milk composition.</p> <p>Abstrak. Penentuan harga susu di tingkat peternak sangat dipengaruhi oleh kadar lemak susu. Perbaikan komposisi susu dengan peningkatan kualitas pakan sulit dilakukan, karena tidak ekonomis. Oleh karena itu perlu dicari ransum yang murah, mudah didapat dan efisien untuk meningkatkan produksi dan komposisi susu. Suatu penelitian telah dilakukan dengan menggunakan ragi <i>Saccharomyces cerevisiae</i> dalam ransum sapi perah laktasi. Penelitian dilaksanakan dengan metode eksperimental, menggunakan Rancangan Bujur Sangkar Latin 4x4. Hewan percobaan sebagai kolom dan periode percobaan sebagai lajur. Setiap periode percobaan terdiri atas 14 hari masa preliminari dan 7 hari percobaan (masa koleksi). Perlakuan yang diuji adalah 4 taraf penambahan ragi <i>Saccharomyces cerevisiae</i> : 0, 5, 10, dan 15 gr/ekor/hari. Peubah respon yang diamati adalah produksi susu harian (4% FCM) dan komposisi susu (BKTL=Bahan Kering Tanpa Lemak, lemak, protein dan laktosa).</p> <p>Hasil penelitian menunjukkan bahwa penambahan ragi tidak berpengaruh nyata terhadap produksi 4% FCM (Fat Corrected Milk) maupun komposisi susu, tetapi cenderung meningkatkan lemak susu dan mencapai kadar tertinggi 5,13% pada penambahan ragi 8,50 g/ekor/hari. Rataan produksi susu 9,55 kg/hari, BKTL (Bahan Kering Tanpa Lemak) 8,70 %, laktosa 3,99%, lemak 4,50% dan protein 0,13%. Berdasarkan semua peubah respon yang diukur dapat disimpulkan bahwa penambahan ragi <i>Saccharomyces cerevisiae</i> sampai 15 gr/ekor/hari belum berhasil memperbaiki produksi dan komposisi susu.</p> <p>Kata kunci : penambahan ragi, produksi susu, komposisi susu.</p>
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