ABSTRAK

WINDI RAHAYU. Penelitian dengan judul "Derajat Keasaman dan Potensial Hidrogen (pH) Susu Segar Sapi Perah di Kecamatan Sumbang dan Baturraden" dilaksanakan pada tanggal 17 Maret – 28 Mei 2019. Tujuan dari penelitian ini adalah untuk mengetahui derajat keasaman dan pH yang terdapat dalam susu segar serta mengetahui hubungan derajat keasman dan pH susu segar di Kecamatan Sumbang dan Baturraden. Materi yang digunakan dalam penelitian ini adalah susu segar dari kelompok tani ternak Tirto Margo Utomo Kecamatan Sumbang dan Margo Mulyo Kecamatan Baturraden dengan pengambilan sampel 10 dari Kecamatan Sumbang dan 20 dari Kecamatan Baturraden. Susu diambil masing-masing 500 ml kemudian dilakukan pengujian derajat keasaman menggunakan metode *Soxhlet Henkel* (^{0}SH) dan pH menggunakan pH meter. Penelitian ini dilakukan dengan metode survey dan laboratorium. Hasil rataan derajat keasaman susu segar di Kecamatan Sumbang sebesar 6,6 ± 0,46 , sedangkan di Kecamatan Baturraden sebesar 7,3 ± 0,86. Rataan pH susu segar di Kecamatan Sumbang sebesar 6,68 ± 0,02 , sedangkan di Kecamatan Baturraden sebesar 6,65 ± 0,04. Hasil analisis data dengan menggunakan uji "t", menunjukan rataan derajat keasaman dan pH susu segar di kelompok peternak Kecamatan Sumbang dan Baturraden berbeda nyata ($P > 0,05$). Hubungan antara derajat keasaman dan pH susu segar Kecamatan Sumbang dan Bturraden diformulasikan sebagai Y = 92,028 + -12,752 X dengan nilai korelasi sebesar R = 0,6257. Kesimpulan derajat keasaman dan pH susu segar di Kecamatan Sumbang dan Baturraden memiliki hasil yang berbeda. Kualitas susu segar ditinjau dari derajat keasaman dan pH di Kecamatan Sumbang dan Baturraden sudah termasuk baik (Sesuai SNI, 2011). Terdapat hubungan yang kuat antara derajat keasaman dan pH susu segar di Kecamatan Sumbang dan Baturraden.

Kata kunci: Derajat keasaman, pH, susu, kecamatan sumbang, kecamatan baturraden.

ABSTRACT

WINDI RAHAYU. Research with the title "Degrees of Acidity and Hydrogen Potential (pH) of Fresh Milk of Dairy Cows in Sumbang and Baturraden Districts" was conducted on March 17 - May 28, 2019. The purpose of this study was to determine the acidity and pH levels contained in milk from Sumbang and Baturraden Districts. fresh and know the relationship between physical degrees and pH of fresh milk in Sumbang and Baturraden Districts. The material used in this study was fresh milk from the farmer groups Tirto Margo Utomo, Sumbang District and Margo Mulyo Baturraden District by taking 10 samples from Sumbang District and 20 from Baturraden District. Milk is taken 500 ml each then the acidity level testing is done using the *Soxhlet Henkel* (^{0}SH) method and the pH using a pH meter. This research was conducted by survey and laboratory methods. The yield of acidity level of fresh milk in Sumbang District was 6.6 ± 0.46, while in Baturraden District it was 7.3 ± 0.86. The average pH of fresh milk in Sumbang District was 6.68 ± 0.02, while in Baturraden District it was 6.65 ± 0.04. The results of data analysis using the "t" test, showed that the average acidity and pH of fresh milk in the Sumbang and Baturraden District farmers was significantly different (P> 0.05). The relationship between the acidity and pH of fresh milk in Sumbang and Bturraden Districts was formulated as Y = 92.028 + -12.752 X with a correlation value of R = 0.6257 . Conclusion the acidity and pH of fresh milk in the Sumbang and Baturraden Districts have different results. The quality of fresh milk in terms of acidity and pH in Sumbang and Baturraden Districts is already good (In accordance with SNI, 2011). There is a strong relationship between the acidity and pH of fresh milk in the sub-districts of Sumbang and Baturraden .

Keywords: Acidity, pH, milk, sumbang district, baturraden district.