

PENGUNAAN PREMIX MINERAL DIPERKAYA ESSENTIAL OILS DAN ATAU
ASAM AMINO TERHADAP PRODUKSI DAN KUALITAS TELUR AYAM
PETELUR PADA PETERNAKAN RAKYAT (PURBOLINGGO,
LAMPUNG TIMUR)

INTISARI

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Penelitian ini bertujuan untuk mengetahui manfaat pemberian Agromix yang diperkaya *Essential Oils* dan asam amino pada ayam petelur terhadap produksi telur dan kualitas telur. Agromix disusun dari bahan mineral dan sembilan essential oils yang terdiri dari *pine oil*, *Gardenia jasminoides*, *Cocos nucifera*, *Eucalyptus globules*, *Herba origani*, *Gummy myrrha*, *Gummy boswellii*, *Cymbopogon citrates* dan *Carrot seed oil*. Sebanyak 480 ekor ayam petelur umur 36 minggu dibagi menjadi empat kelompok perlakuan. Setiap perlakuan terdiri dari 6 replikasi, 20 ekor setiap replikasi. Empat kelompok perlakuan pada penelitian ini terdiri dari kelompok kontrol (P0) yaitu pakan basal ditambah Mix Master (mengandung enzim, vitamin, zinc organic, asam amino, serta mikro dan makro mineral) sebanyak 0,2% pakan, kelompok perlakuan 1 (P1) yaitu pakan basal ditambah Agromix sebanyak 0,2% pakan, perlakuan 2 (P2) yaitu pakan basal ditambah Agromix dan *blend essential oils* sebanyak 0,2% pakan, dan perlakuan 3 (P3) yaitu pakan basal ditambah Agromix, *blend essential oils* dan asam amino sebanyak 0,2% pakan. Sampel dalam penelitian ini meliputi data produksi telur dan kualitas telur yang diambil dari ayam yang diberi pakan dengan penambahan Agromix yang diperkaya *Essential Oils* dan atau asam amino. Pengamatan produksi telur dan kualitas telur dilakukan setiap minggu setelah penerapan perlakuan. Berdasarkan hasil penelitian pemberian Agromix yang diperkaya *Essential Oils* dan asam amino pada ayam petelur dapat disimpulkan bahwa secara umum tidak berpengaruh terhadap parameter produksi telur dan kualitas telur pada peternakan rakyat (Purbolinggo, Lampung Timur). Namun, hasil penelitian juga menunjukkan bahwa perlakuan P3 menghasilkan nilai *Haugh Unit* tertinggi yaitu 85,10, FCR sebesar 2,34, nilai efisiensi pakan tertinggi sebesar 42,8% dan nilai kandungan lemak telur tertinggi sebesar 9,80% jika dibandingkan dengan perlakuan P0 ($P < 0,05$). Berdasarkan hasil penelitian yang telah dilakukan dapat disimpulkan bahwa pemberian premix mineral, premix mineral yang diperkaya *blend essential oils* serta premix mineral yang diperkaya *blend essential oils* dan asam amino yang digunakan sebagai alternatif imbuhan pakan pada pakan ayam petelur dapat meningkatkan efisiensi pakan dan kualitas telur pada peternakan rakyat (Purbolinggo, Lampung Timur). Pemberian premix mineral yang diperkaya *blend essential oils* dan asam amino menunjukkan hasil yang terbaik jika dibandingkan dengan semua perlakuan yang lainnya.

Kata kunci: Premix mineral, *Essential Oils*, Produksi Telur, Kualitas Telur

THE USE OF MINERAL PREMIX ENRICHED WITH ESSENTIAL OILS AND OR
AMINO ACIDS ON THE PRODUCTION AND QUALITY OF LAYING
CHICKEN EGGS ON THE SMALLHOLDER FARMS
(PURBOLINGGO, LAMPUNG TIMUR)

ABSTRACT

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This study aims to evaluate the use of giving Agromix enriched with essential oils and amino acids to laying hens on egg production and egg quality. Agromix is composed of mineral and nine essential oils consisting of pine oil, *Gardenia jasminoides*, *Cocos nucifera*, *Eucalyptus globules*, *Herba origani*, *Gummy myrrha*, *Gummy boswellii*, *Cymbopogon citrates* and *Carrot seed oil*. As many as 480 laying hens aged 36 weeks were divided into four treatment groups. Each treatment consisted of 6 replications, 20 individuals per replication. The four treatment groups in this study consisted of a control group (P0) namely basal feed plus Mix Master (Contains enzymes, vitamins, organic zinc, amino acids, as well as micro and macro minerals) as much as 0,2% of feed, treatment group 1 (P1) namely basal feed plus Agromix as much as 0,2% of feed, treatment 2 (P2) namely basal feed plus Agromix and blended essential oils as much as 0,2% of feed, and treatment 3 (P3), namely basal feed plus Agromix, blended essential oils and amino acids as much as 0,2% of feed. The sample in this study included data on egg production and egg quality taken from hens fed with the addition of Agromix enriched with essential oils and/or amino acids. Observations of egg production and egg quality were carried out every week after the giving of the treatment. Based on the results of the use of giving Agromix enriched with essential oils and amino acids to laying hens that has been carried out, it can be concluded that in general did not affect the parameters of egg production and egg quality on smallholder farms (Purbolinggo, East Lampung). However, the results also showed that the P3 treatment produced the highest Haugh Unit value of 85.10, FCR of 2.34, the highest feed efficiency value of 42.8% and the highest egg fat content value of 9.80% when compared to P0 treatment. ($P < 0.05$). Based on the results of the research that has been carried out, it can be concluded that the provision of mineral premixes, mineral premixes enriched with blended essential oils and mineral premixes enriched with blends of essential oils and amino acids which are used as alternative feed additives in laying hens feed can improve feed efficiency and egg quality on smallholder farms (Purbolinggo, East Lampung). The provision of mineral premix enriched with blends of essential oils and amino acids showed the best results when compared to all other treatments.

Keywords: Mineral premix, Essential Oils, Egg Production, Egg Quality