

ABSTRAK

PENGARUH SUPLEMENTASI VITAMIN C, VITAMIN E, DAN KOMBINASI KEDUANYA TERHADAP ERITROSIT, HEMOGLOBIN, DAN *PACKED CELL VOLUME* DARAH KAMBING JAWARANDU JANTAN

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Penelitian ini bertujuan untuk mengetahui pengaruh suplementasi vitamin C, vitamin E, dan kombinasi keduanya terhadap eritrosit, hemoglobin, dan *packed cell volume* darah kambing Jawarandu jantan. Penelitian ini dilaksanakan dari Januari-Maret 2025 di kandang kambing Sinau Farm, Desa Karang Rejo, Kecamatan Metro Utara, Kabupaten Metro. Penelitian ini menggunakan metode Rancangan Acak Lengkap (RAL) dengan 4 perlakuan dan 3 ulangan. Perlakuan yang diberikan pada penelitian ini yaitu P0: ransum basal tanpa penambahan vitamin C dan E; P1: ransum basal + vitamin C 100 mg; P2: ransum basal + vitamin E 50 IU; P3: ransum basal + vitamin C 100 mg + vitamin E 50 IU. Pengambilan sampel darah dilakukan di vena jugularis pada hari ke-28 dan pemeriksaan sampel dilakukan di Laboratorium Pro Lab Veterinary, Sleman, Yogyakarta. Peubah yang diamati yaitu eritrosit, hemoglobin, dan *packed cell volume* darah kambing Jawarandu jantan. Data yang diperoleh dianalisis dengan cara deskriptif. Hasil penelitian menunjukkan adanya peningkatan total eritrosit, hemoglobin, dan *packed cell volume* darah kambing Jawarandu jantan dan berada dalam batas normal. Berdasarkan hasil penelitian suplementasi vitamin C, vitamin E, dan kombinasi keduanya dapat meningkatkan total eritrosit, hemoglobin, dan *packed cell volume* darah kambing Jawarandu jantan. Suplementasi vitamin C dan E yang digunakan secara bersamaan menunjukkan hasil lebih baik dibandingkan suplementasi salah satu vitamin saja.

Kata kunci: Eritrosit, hemoglobin, kambing Jawarandu jantan, *packed cell volume*

ABSTRACT

THE EFFECT OF VITAMIN C, VITAMIN E, AND THEIR COMBINATION SUPPLEMENTATION ON ERYTHROCYTES, HEMOGLOBIN, AND PACKED CELL VOLUME IN MALE JAWARANDU GOATS

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This study aims to determine the effect of supplementation with vitamin C, vitamin E, and their combination on the erythrocytes, hemoglobin, and packed cell volume in the blood of male Jawarandu goats. The research was conducted from January to March 2025 at Sinau Farm goat pen, Karang Rejo Village, North Metro District, Metro Regency. This study used a Completely Randomized Design (CRD) with 4 treatments and 3 replications. The treatments given in this study were P0: basal feed without the addition of vitamins C and E; P1: basal feed + vitamin C 100 mg; P2: basal feed + vitamin E 50 IU; P3: basal feed + vitamin C 100 mg + vitamin E 50 IU. Blood samples were taken from the jugular vein on the 28th day, and the samples were examined at the Pro Lab Veterinary Laboratory, Sleman, Yogyakarta. The observed variables are erythrocytes, hemoglobin, and packed cell volume of male Jawarandu goats. The data obtained were analyzed descriptively. The results of the study showed an increase in total erythrocytes, hemoglobin, and packed cell volume in male Jawarandu goats, and these values were within normal limits. Based on the results of the study, supplementation with vitamin C, vitamin E, and their combination can increase total erythrocytes, hemoglobin, and packed cell volume in male Jawarandu goats. The simultaneous supplementation of vitamins C and E showed better results compared to supplementation with just one vitamin.

Keywords: Erythrocytes, hemoglobin, male Jawarandu goats, packed cell volume