

ABSTRAK

PENGARUH PEMBERIAN EKSTRAK DAUN PEPAYA TERHADAP KONSENTRASI, VIABILITAS, DAN ABNORMALITAS SPERMA KAMBING JAWARANDU

Oleh

Eka Meilinda Putri

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian ekstrak daun pepaya terhadap konsentrasi, viabilitas, dan abnormalitas sperma kambing Jawarandu. Penelitian ini dilaksanakan pada bulan September--Desember 2024 di Desa Adijaya, Kecamatan Terbanggi Besar, Kabupaten Lampung Tengah. Pengamatan konsentrasi, viabilitas, dan abnormalitas dilakukan di UPTD Balai Inseminasi Buatan Daerah Lampung, Kecamatan Terbanggi Besar, Kabupaten Lampung Tengah. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 4 percobaan dan 3 ulangan. Percobaan dilakukan pada 12 ekor kambing Jawarandu jantan berumur 10--14 bulan. Perlakuan yang diberikan yaitu *complete feed* (P0), *complete feed* + 75 mg ekstrak daun pepaya /kg BB/hari (P1), *complete feed* + 150 mg ekstrak daun pepaya /kg BB/hari (P2), dan *complete feed* + 225 mg ekstrak daun pepaya /kg BB/hari (P3). Data yang diperoleh dianalisis menggunakan analisis ragam dengan taraf 5% dilanjutkan dengan uji polinomial ortogonal. Hasil penelitian menunjukkan bahwa pemberian ekstrak daun pepaya tidak berpengaruh nyata ($P>0,05$) terhadap konsentrasi, viabilitas, dan abnormalitas kambing Jawarandu. Hasil uji polinomial ortogonal menunjukkan bahwa penambahan ekstrak daun pepaya menurunkan konsentrasi sperma dengan persamaan $Y = 2.956,6 - 1,2849x$, penambahan ekstrak daun pepaya menurunkan viabilitas sperma dengan persamaan $Y = 84,167 - 0,0067x$, dan penambahan ekstrak daun pepaya meningkatkan abnormalitas sperma dengan persamaan $Y = 10,2 + 0,0049x$.

Kata kunci: Abnormalitas, Ekstrak Daun Pepaya, Kambing Jawarandu, Konsentrasi, Viabilitas

ABSTRACT

EFFECT OF PAPAYA LEAF EXTRACT ON SPERM CONCENTRATION, VIABILITY, AND ABNORMALITY IN JAWARANDU GOATS

By

Eka Meilinda Putri

This study aims to determine the effect of papaya leaf extract on the concentration, viability, and sperm abnormality of Jawarandu goats. This research was conducted from September to December 2024 in Adijaya Village, Terbanggi Besar District, Central Lampung Regency. Observations of concentration, viability, and abnormality were made at the UPTD of Lampung Regional Artificial Insemination Center, Terbanggi Besar District, Central Lampung Regency. This study used a completely randomized design (CRD) with 4 experiments and 3 replications. The experiment was conducted on 12 male Jawarandu goats aged 10--14 months. The treatments given were complete feed (P0), complete feed + 75 mg papaya leaf extract /kg BW/day (P1), complete feed + 150 mg papaya leaf extract /kg BW/day (P2), and complete feed + 225 mg papaya leaf extract /kg BW/day (P3). The data obtained were analyzed using analysis of variance at the 5% level followed by orthogonal polynomial test. The results showed that the administration of papaya leaf extract had no significant effect ($P>0.05$) on the concentration, viability, and abnormality of Jawarandu goats. Orthogonal polynomial test results showed that the addition of papaya leaf extract decreased sperm concentration with the equation $Y = 2.956,6 - 1,2849x$, the addition of papaya leaf extract decreased sperm viability with the equation $Y = 84,167 - 0,0067x$, and the addition of papaya leaf extract increased sperm abnormality with the equation $Y = 10,2 + 0,0049x$.

Keywords: Abnormality, Papaya Leaf Extract, Jawarandu Goat, Concentration, Viability