Abstrak

PENGARUH KOMBINASI REBUSAN DAUN CIPLUKAN (*Physalis angulata L.*) DAN DAUN SALAM (*Syzygium polyanthum*) TERHADAP KADAR LDL TIKUS PUTIH (*Rattus norvegicus*)

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Latar Belakang: Peningkatan kadar kolesterol *Low-Denstity Lipoprotein* (LDL) dapat menyebabkan plak di dinding arteri serta menjadi faktor penyebab terjadinya infark miokard. Tujuan dari penelitian ini adalah mengetahui pengaruh pemberian air rebusan kombinasi daun ciplukan *(Physalis angulate L.)* dan daun salam *(Syzygium polyanthum)* terhadap kadar LDL tikus putih *(Rattus norvegicus)* yang telah diinduksi *High Fat Diet* (HFD) dan Propiltiourasil (PTU).

Metode: Penelitin experimental ini menggunakan metode *pretest-posttest with control group design*. Pengambilan sampel menggunakan metode simpel random sampling dengan jumlah 30 ekor tikus. Hewan coba dibagi menjadi 6 kelompok perlakukan. Kelompok A merupakan kelompok normal, Kelompok B merupakan kelompok kontrol negatif, C kombinasi 1:1, D kombinasi 1:2, E 2:1, serta kelompok F merupakan kelompok kontrol positif yang diberikan simvastatin selama 14 hari. Kadar kolesterol LDL diukur menggunakan spektrofotometer pada λ 546 nm. Data diolah dengan menggunakan uji *one-way ANOVA* yang dilanjutkan dengan uji Post hoc *Duncan*.

Hasil: Terdapat perbedaan yang bermakna antara kelompok B, C, D, E, dan F yang diberikan HFD dan PTU terhadap kelompok normal A. Terdapat penurunan kadar LDL yang signifikan pada kelompok C, D, E, dan F. Dosis optimal kombinasi daun ciplukan dan daun salam yang dapat diberikan yaitu dengan perbandingan 1:1 (160mg/200gBB : 720mg/200gBB). Kelompok yang diberi air rebusan kombinasi daun ciplukan dan daun salam memiliki efek menurunkan kadar LDL lebih baik dibanding dengan simvastatin

Kesimpulan: Pemberian air rebusan kombinasi daun ciplukan dan daun salam dapat menurunkan kadar LDL tikus putih jantan yang diberi HFD dan PTU.

Kata kunci: Daun Ciplukan *(Phyasalis angulate L.)*, Daun Salam *(Syzygium polyanthum*), Kadar LDL, Tikus Putih

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Abstract

THE EFFECT OF COMBINATION OF GOLDEN BERRY LEAF (*Physalis angulata L.*) AND BAY LEAF (*Syzygium polyanthum*) ON LDL LEVELS IN WHITE RATS (*Rattus norvegicus*)

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Background: Increased levels of *Low-Density Lipoprotein* (LDL) cholesterol can cause plaque on artery walls and be a contributing factor to myocardial infarction. The purpose of this study was to find out the effect of giving water decoction combination of golden berry leaves *(Physalis angulate L.)* and bay leaves *(Syzygium polyanthum)* against LDL levels of white rats *(Rattus norvegicus)* that have induced a *High-Fat Diet* (HFD) and propylthiouracil (PTU).

Metode: This experimental research study used the pretest-posttest method with a control group design. Use a simple random sampling method with 30 rats. Rats were divided into six treatment groups. Group A was the normal control group, group B was the negative control group, group C combination was 1:1, group D combination was 1:2, group E was 2:1, and group F was the positive control group, treated with simvastatin. LDL cholesterol levels were measured using a spectrophotometer at λ 546 nm. The data will be processed using the One-way ANOVA test followed by Duncan's Post hoc test.

Result: There is a significant difference between groups B, C, D, E, and F given HFD and PTU to normal group A. There was a significant reduction in LDL levels in groups C, D, E, and F. The optimal dose of a combination of ciplukan leaves and bay leaves that can be given is by a ratio of 1:1 (160mg/200gBB: 720mg/200gBB). The group was given boiled water a combination of ciplukan leaves and bay leaves had the effect of lowering LDL levels better than simvastatin.

Conclusion: The provision of boiled water a combination of ciplukan leaves and bay leaves can lower the LDL levels of male white rats given HFD and PTU.

Key Words: Ciplukan Leaf *(Physalis angulate L.)*, Salam Leaf *(Syzygium polyanthum*), LDL Level, White Rats.

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