# SKRINING FITOKIMIA DAN UJI EFEKTIVITAS PENURUNAN ASAM URAT DARI EKSTRAK ETANOL DAUN BUNGA TAHI AYAM

***(Tagetes erecta* L*)* TERHADAP TIKUS PUTIH JANTAN**

**(*Rattus norvegicus* L)**

**MIFTAHUDDIN**

**182114068**

**ABSTRAK**

Penyembuhan hiperusemia dapat dilakukan dengan allopurinol, namun sering menimbulkan efek samping. Daun bunga tahi ayam telah terbukti secara empiris sebagai obat antirematik, persendian, dan pegal linu, besar kemungkinan efektivitasnya menurunankan asam urat, karena mengandung flavonoid, tannin, dan steroid/triterpenoid, menghambat pembentukan asam urat dengan cara menghambat enzim hipoxantin dan xantin. Tujuan penelitian untuk mengetahui kandungan senyawa metabolit sekunder dan efektivitas ekstrak etanol daun bunga tahi ayam sebagai penurun asam urat.

Penelitian diawali dengan identifikasi tumbuhan. Ekstrak bunga tahi ayam dibuat secara maserasi menggunakan etanol 96%. Skrining fitokimia dilakukan terhadap daun bunga tahi ayam segar, simplisia, dan ekstrak etanol nya. Penentuan efektivitas penurunan asam urat dilakukan pada tikus putih jantan yang diinduksikan dengan kalium oksonat 250 mg/kgBB, selanjutnya diberikan ekstrak etanol daun bunga tahi ayam 100mg/KgBB; 200mg/KgBB; dan300 mg/KgBB, dan allopurinol 10 mg/KgBB sebagai pembanding. Kadar asam urat diukur setiap jam selama 6 jam, dan dihitung persentase penurunan asam urat, Kemudian datanya dianalisis menggunakan One-Way ANOVA dilanjutkan uji Tukey HSD.

Hasil penelitian menunjukkan bahwa daun bunga tahi ayam segar, simplisia dan ekstrak etanol nya mengandung senyawa flavonoid, tannin, steroid, saponin. Ekstrak etanol daun bunga tahi ayam mempunyai efektivitas penurunan asam urat, mulai terlihat pada dosis 100 mg/KgBB jam pertama sebesar (3,26 ± 0,01) %, dan presentase penurunan yang paling tinggi pada dosis 300 mg/KgBB pada jam ke 5 (44,53±0,84)% dan ke 6 (54,38±0,84)%, tidak berbeda signifikan dengan pemberian allopurinol 10 mg/KgBB jam ke 5 (47,48±0,51)% dan jam ke 6 (54,45 ± 0,90)%, dan terdapat perbedaan dengan berbagai kelompok lainnya.

**Kata Kunci :** *Daun bunga tahi ayam, Hiperusemia, Allopurinol, kalium oksonat.*

# *THE PHYTOCHEMICAL SCREENING AND EFFECTIVENESS TEST OF URIC ACID REDUCTION FROM CHICKEN MOLE LEAF ETHANOL EXTRACT (Tagetes erecta L) ON WHITE MALE MICE (Rattus norvegicus L)*

**MIFTAHUDDIN**

**182114068**

**ABSTRAK**

*Healing hyperusemia can be done with allopurinol, but often causes side effects. Chicken mole leaves have been empirically proven as antirheumatic drugs, joints, and sciatica, most likely its effectiveness decreases uric acid, as it contains flavonoids, tannins, and steroids/triterpenoids, inhibiting the formation of uric acid by inhibiting the enzymes hipoxantin and xantin. The objective of the research was to find out the content of secondary metabolites compounds and the effectiveness of chicken mole leaf ethanol extract as a lowering of uric acid.*

*Research began with plant identification. Chicken mole extract was made by maseration using 96% ethanol. Phytochemical screening was carried out against fresh chicken mole leaves, simplisia, and ethanol extract. Determination of the effectiveness of uric acid reduction was carried out in male white rats induced with potassium oxonate 250 mg/kgBB, further administered ethanol extract of chicken mole leaves 100mg/KgBB; 200mg/KgBB; and 300 mg/KgBB, and allopurinol 10 mg/KgBB as comparisons. Uric acid levels were measured every hour for 6 hours, and calculated the percentage of uric acid reduction, then the data was analyzed using One-Way ANOVA followed tukey HSD test.*

*The results showed that fresh chicken mole leaves, simplisia and its ethanol extracts contained flavonoid compounds, tannins, steroids, saponins. Ethanol extract of chicken mole leaves has the effectiveness of decreased uric acid, starting to be seen at a dose of 100 mg/KgBB the first hour of (3.26 ± 0.01) %, and the highest percentage reduction at a dose of 300 mg /KgBB at the 5th hour (44.53±0.84)% and to 6 (54.38±0.84)%, not significantly different from the administration of allopurinol 10 mg / KgBB hours to 5 (47.48±0.51)% and the 6th hour (54.45 ± 0.90)%, and there are differences with various other groups.*

***Keywords :*** *Chicken mole petals, Hyperusemia, Allopurinol, potassium oxonate.*