ABSTRAK

Daun tanaman gamal *(Gliricidia sepium)* memiliki kandungan metabolit sekunder yang dapat menghambat pertumbuhan mikroorganisme. Penelitian ini bertujuan untuk membuktikan bahwa ekstrak metanol daun gamal signifikan (P<0,05) menghambat pertumbuhan bakteri *N. gonorrhoeae* dan *C. albicans*. Penelitian ini dilakukan di Laboratorium Mikrobiologi Universitas PGRI Adi Buana Surabaya. Penelitian ini menggunakan rancangan acak kelompok (RAK) dan perlakuan konsentrasi 0 mg/ml, 25 mg/ml, 50 mg/ml, 100 mg/ml, 150 mg/ml, 200 mg/ml dan kloramfenikol. Setiap perlakuan diulang 3 (tiga), penelitian ini dilakukan secara in vitro. Hasil penelitian menunjukan bahwa ekstrak daun gamal konsentrasi 25 mg/ml, 50 mg/ml, 100 mg/ml, 150 mg/ml dan 200 mg/ml signifikan (P<0,05) menghambat pertumbuhan bakteri *N. gonorrhoeae* dan *C. albicans.* Penelitian ini juga menunjukan bahwa adanya perbedaan zona hambatan yang signifikan (P<0,05) ekstrak metanol daun gamal terhadap bakteri *N. gonorrhoeae* dan fungi *C. albicans.* Daya hambat ekstrak metanol daun gamal terhadap fungi *C. albicans* lebih tinggi dibandingkan dengan bakeri *N. gonorrhoeae*. Hasil penelitian dapat disimpulkan bahwa ekstrak metanol daun gamal *(Gliricidia sepium)* signifikan (P<0,05) menghambat pertumbuhan bakteri *N. gonorrhoeae* dan *C. albicans*.

Kata kunci: Daun gamal, antimikroorganisme, *Neisseria gonorrhoeae, Candida albicans*

ABSTRACT

The leaves of gamal plants *(Gliricidia sepium)* have secondary metabolites that can inhibit the growth of microorganisms. This study aims to prove that significant gamal leaf methanol extract (P<0.05) inhibits the growth of *N. gonorrhoeae* and *C. albicans*bacteria. This research was conducted in the Microbiology Laboratory of PGRI Adi Buana University Surabaya. The study used a randomized group design (RAK) and a concentration treatment of 0 mg/ml. 25 mg/ml, 50 mg/ml, 100 mg/ml, 150 mg/ml, 200 mg/ml and chloramphenicol. Each treatment is repeated 3 (three), this study was conducted in vitro. The results showed that gamal leaf extract concentrations of 25 mg/ml, 50 mg/ml, 100 mg/ml, 150 mg/ml and 200 mg/ml significantly (P<0.05) inhibited the growth of *N. gonorrhoeae* and *C. albicans bacteria.* This study also showed that there are significant barrier zone differences (P<0.05) of gamal leaf methanol extract against the bacteria *N. gonorrhoeae* and fungi *C. albicans.* The tasteless power of methanol extract of gamal leaves against fungi *C. albicans* is higher compared to bakeri *N. gonorrhoeae*. The results can be concluded that methanol extract of gamal leaves *(Gliricidia sepium)* significantly (P<0.05) inhibits the growth of bacteria *N. gonorrhoeae* and *C. albicans*.

Keywords: Gamal leaves, antimicroorganism, *Neisseria gonorrhoeae, Candida albicans*