

BAB V

KESIMPULAN DAN SARAN

V.1. Kesimpulan

Dari hasil penelitian dapat ditarik beberapa kesimpulan sebagai berikut:

1. Semakin lama waktu ekstraksi maka semakin banyak TPC dan TFC yang dihasilkan sehingga *metal chelating activity* meningkat.
2. Peningkatan suhu dari 30 ke 45⁰C meningkatkan TPC yang diperoleh, namun peningkatan suhu dari 45 ke 60⁰C menurunkan TPC yang diperoleh. Hal tersebut juga berlaku untuk TFC dan aktivitas *metal chelating activity*.
3. Peningkatan massa kulit dari rasio 1:30 ke 1:20 meningkatkan TPC yang diperoleh, namun peningkatan massa kulit dari rasio 1:20 ke 1:10 menurunkan TPC yang diperoleh. Hal tersebut juga berlaku untuk TFC dan *metal chelating activity*.
4. Kondisi optimum ekstraksi yang didapat adalah pada suhu 55,9571⁰C dan rasio massa kulit : volume pelarut 1 : 25,6060 dengan waktu ekstraksi 98,2226 menit. TPC teoritis pada kondisi optimum ini adalah 8,329 mg GAE/g kulit.
5. Dilakukan pengujian ulang perolehan TPC pada kondisi optimum yaitu pada suhu 56⁰C dan rasio massa kulit : volume pelarut 1 : 25,6 dengan waktu ekstraksi 98 menit 13 detik. Diperoleh TPC aktual dari kondisi optimum ini sebesar 8,623 mg GAE/g kulit.

V.2. Saran

Dari hasil penelitian ini, beberapa saran yang diberikan antara lain:

1. Perlu diadakan penelitian lebih lanjut untuk menentukan senyawa fenolik mana yang berpengaruh terhadap *metal chelating activity*.
2. Aktivitas antioksidan lainnya seperti *free radical scavenging*, *lipid peroxidation* perlu diuji.

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