

BAB VI

KSEIMPULAN DAN SARAN

6.1. Kesimpulan

1. Penambahan bubuk daun stevia di berbagai konsentrasi pada minuman teh hitam berpengaruh pada senyawa fitokimia; total fenol; total flavonoid; dan aktivitas antioksidan (metode DPPH dan reduksi ion besi).
2. Hasil penelitian total fenol berkisar antara 153,57-215,98 mg GAE/L sampel; total flavonoid berkisar antara 23,15-36,75 mg CE/L sampel; kemampuan menangkal radikal bebas DPPH berkisar antara 23,11-37,02 mg GAE/L sampel; dan kemampuan mereduksi ion besi berkisar antara 464,74-713,63 mg GAE/L sampel.
3. Perlakuan yang tepat dengan aktivitas antioksidan tertinggi adalah perlakuan 6 (0,37%) dengan total fenol 215,98 mg GAE/L sampel; total flavonoid 36,75 mg CE/L sampel; kemampuan menangkal radikal bebas sebesar DPPH 37,02 mg GAE/L sampel; dan kemampuan mereduksi ion besi sebesar 713,63 mg GAE/L sampel.
4. Berdasarkan *pearson correlation* antara total fenol dan total flavonoid dengan kemampuan menangkal radikal bebas DPPH dan kemampuan mereduksi ion besi, maka antioksidan pada minuman teh hitam dengan bubuk stevia merupakan antioksidan primer dan sekunder.

6.2. Saran

1. Perlu penelitian lebih lanjut mengenai pengaruh waktu penyeduhan dan waktu tunggu untuk dilakukan pengujian terhadap stabilitas antioksidan minuman teh hitam dengan bubuk stevia.
2. Perlu penelitian lebih lanjut mengenai aktivitas antioksidan minuman teh hitam dengan bubuk daun stevia secara *in vivo*.

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