

KARAKTERISTIK TEH HERBAL DAUN KOPI LIBERIKA (*Coffea liberica var*) DENGAN PENAMBAHAN SERBUK SERAI (*Cymbopogon nardus L.Rendle*)

*Characteristic of Herbal Tea Leaves Coffe Liberika (Cofe liberica var)
With Additional Lemongrass Powder (Cymbopogon nardus L.Rendle)*

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ABSTRAK

Teh herbal daun kopi mengandung sejumlah besar metabolit sekunder seperti polifenol, tanin, antioksidan dan kafein. Senyawa yang terkandung dalam serai antara lain senyawa geraniol dan sitrinelal. Manfaat dari konsumsi teh daun kopi liberika dengan penambahan serai dengan kandungan antioksidan yang tinggi dapat meningkatkan taraf kesehatan. Daun kopi memiliki kandungan antioksidan sekitar 55,43-89,78%. Aktifitas antioksidan dalam essential oil pada batang serai sangat tinggi dengan daya hambat yang efektif sebesar 89% dan 89,63%. Tujuan penelitian untuk mengetahui pengaruh konsentrasi penambahan serbuk serai pada pembuatan teh herbal daun kopi liberika dun untuk mengetahui mutu kimia (aktivitas antioksidan, tanin, dan kadar air) dan organoleptik metode hedonik (rasa, aroma, dan warna) teh herbal daun kopi liberika dengan penambahan serbuk serai. Penelitian ini menggunakan Rancangan Acak Lengkap dengan 5 taraf perlakuan yaitu teh herbal daun kopi liberika dengan penambahan serbuk serai (0%, 10%, 20%, 30%, 40%) dengan 4 kali pengulangan sehingga diperoleh sebanyak 20 satuan percobaan. Parameter yang diamati adalah antioksidan, tanin, kadar air, dan uji mutu hedonik (rasa, aroma, warna) dan uji hedonik(keseluruhan). Data yang diperoleh dianalisis menggunakan ANOVA. Apabila data yang diperoleh berpengaruh nyata, maka dilanjutkan dengan uji Duncan's Multiple Range Test. Hasil penelitian ini berbagai penambahan serbuk serai berpengaruh nyata terhadap teh herbal daun kopi liberika yang dihasilkan. Nilai antioksidan tanpa penambahan serbuk serai (67,80%), penambahan 10% (68,34%), penambahan 20% (68,75%), penambahan 30% (73,14%), penambahan 40% (73,68%). Nilai total tanin tanpa penambahan serbuk serai (7,68 mg TAE/G ekstrak), penambahan 10% (9,81 mg TAE/G ekstrak, penambahan 20% (10,26 mg TAE/G ekstrak), penambahan 30% (10,59 mg TAE/G ekstrak), penambahan 40% (11,92 mg TAE/G ekstrak). Kadar air tanpa penambahan serbuk serai (2,37%), penambahan 10% (2,80%), penambahan 20% (3,25%), penambahan 30% (3,61%), penambahan 40% (4,29%). Uji organoleptik terbaik pada penambahan serbuk serai 20% dengan deskripsi rasa 4,12 (sepat), aroma 3,82 (agak beraroma), warna 3,92 (agak pekat) serta penerimaan keseluruhan menurut penalis dengan nilai 4,08 (suka) terhadap seduhan teh herbal dengan penambahan serbuk serai.

Kata kunci: Daun Kopi Liberika, Serbuk Serai

ABSTRACT

Coffee leaf herbal tea contains a large number of secondary metabolites such as polyphenols, tannins, antioxidants and caffeine. Compounds contained in lemongrass include geraniol and citrinellal compounds. The benefits of consuming liberica coffee leaf tea with the addition of lemongrass with high antioxidant content can improve health levels. Coffee leaves have an antioxidant content of around 55.43-89.78%. The antioxidant activity in essential oils in lemongrass stems is very high with an effective inhibitory power

of 89% and 89.63%. The purpose of the study was to determine the effect of the concentration of lemongrass powder addition in the manufacture of liberica coffee leaf herbal tea and to determine the chemical quality (antioxidant activity, tannins, and water content) and organoleptic hedonic method (taste, aroma, and color) of liberica coffee leaf herbal tea with the addition of lemongrass powder. This study used a Completely Randomized Design with 5 levels of treatment, namely liberica coffee leaf herbal tea with the addition of lemongrass powder (0%, 10%, 20%, 30%, 40%) with 4 repetitions so that 20 experimental units were obtained. The parameters observed were antioxidants, tannins, water content, and hedonic quality tests (taste, aroma, color) and hedonic tests (overall). The data obtained were analyzed using ANOVA. If the data obtained had a significant effect, then it was continued with Duncan's Multiple Range Test. The results of this study showed that various additions of lemongrass powder had a significant effect on the liberica coffee leaf herbal tea produced. Antioxidant value without the addition of lemongrass powder (67.80%), addition of 10% (68.34%), addition of 20% (68.75%), addition of 30% (73.14%), addition of 40% (73.68%). Total tannin value without the addition of lemongrass powder (7.68 mg TAE/G extract), addition of 10% (9.81 mg TAE/G extract), addition of 20% (10.26 mg TAE/G extract), addition of 30% (10.59 mg TAE/G extract), addition of 40% (11.92 mg TAE/G extract). Water content without the addition of lemongrass powder (2.37%), addition of 10% (2.80%), addition of 20% (3.25%), addition of 30% (3.61%), addition of 40% (4.29%). The best organoleptic test on the addition of 20% lemongrass powder with a taste description of 4.12 (bitter), aroma 3.82 (slightly aromatic), color 3.92 (slightly thick) and overall acceptance according to the analyst with a value of 4.08 (like) for herbal tea infusion with the addition of lemongrass powder.

Keyword: Liberica Coffee Leaves, Lemongrass Powder