

ABSTRACT

Khlu (*Pluchea indica*) is a plant with anti-inflammatory and antioxidant medicinal properties. Consumption of Khlu leaves as a culinary herb offers significant health-promoting compounds. Khlu tea has been commercially available in Thailand as a health-promoting drink. In this research, herbal Khlu tea were developed with addition of 1%, 2%, 3% and 4% of *Centella asiatica* (Asiatic pennywort or Bua bok) and *Aegle marmelos* (Bael fruit). Khlu and Asiatic pennywort was dried using tray dryer at 45°C for 48 hours, while bael fruit was for 2 hours. Dried ingredients were ground, and 5 g of solid mixture was packed and sealed in tea sachet. As the results, the best formula was 4% Asiatic pennywort and 3% bael fruit. For total phenolic compound, total flavonoid content, scavenging activity, and IC50, 4% Asiatic pennywort-Khlu tea had as 26.12 ± 1.50 mg GAE/ g sample, 18.02 ± 2.62 mg GAE/ g sample, 71.38 ± 9.77%, 76.04 ± 7.62 µL, respectively, while 3% Bael fruit-Khlu tea had 33.35 ± 4.40 mg GAE/ g sample, 20.56 ± 2.97 mg GAE/ g sample, 83.58 ± 8.87%, and 7.30 ± 2.15 µL, respectively. The pH of 4% Asiatic pennywort-Khlu tea was 5.57 ± 0.01 and 3% Bael fruit-Khlu tea was 5.63 ± 0.02.

KEYWORDS: *Pluchea indica*/ Khlu tea/ antioxidant/ phenolic/ flavonoid/ IC50/ sensory analysis