Chilean boldo is a plant widely consumed in Brazil. Its antioxidant capacity is often associated to boldine and flavonoids in its non-volatile fraction. Its volatile fraction (essential oil) also presents compounds, like camphene, with antioxidant potential. However, the contribution of these terpenic compounds to the antioxidant property of Chilean boldo is often neglected. So, the aim of this work was to evaluate for the first time the antioxidant capacity of Chilean boldo essential oils from commercial samples. Besides, the antioxidant capacities of the teas were also monitored. Six different samples from sachets and four samples from plastic bags were acquired. Essential oils were isolated by hydrodistillation (100°C, 2 hours). To prepare the teas, samples (0.2 g) were infused in boiling water (50 mL) with shaking (10 min). This extracted was filtered and adjusted to a volume of 100 mL. Then, four dilutions were prepared (0.10 mg mL⁻¹, 0.15 mg mL⁻¹, 0.30 mg mL⁻¹ and 0.60 mg mL⁻¹). The antioxidant activity was evaluated by DPPH assay, using four methanol solutions of each essential oil (1.0 mg mL⁻¹, 4.0 mg mL⁻¹, 8.0 mg mL⁻¹, 12.0 mg mL⁻¹) or the four above mentioned teas of each sample to make the antioxidant capacity curve that was employed to calculate the IC₅₀ values. The mean IC₅₀ value found for the essential oils was (12.50 ± 1.37) mg mL⁻¹. This value was 28.8 times bigger (p<0.05) than that found for teas [IC₅₀ = (0.43 ± 0.14) mg mL⁻¹], indicating that the antioxidant activity was concentrated in the non-volatile fraction of these herbs. This last IC₅₀ value was 4.7 times bigger than that found for rutin (IC₅₀ = 0.093 mg mL⁻¹) and 51.1 times bigger than that calculated for gallic acid (IC₅₀ = 0.0085 mg mL⁻¹), both used as positive controls. So, these teas presented a better antioxidant capacity than the essential oils. On the other hand, they must be considered weaker than rutin and gallic acid in respect to its antioxidant power. No statistical differences (p>0.05) were noted between the IC₅₀ values found for the essential oils from the sachet samples and those found for plastic bag samples. The same behavior was noted when the IC₅₀ values of the teas were analyzed.

Keywords: Antioxidant capacity; Chilean boldo; commercial samples