ANTIOXIDANT ACTIVITY OF AVOCADO SEEDS (Persea americana Mill)

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Abstract. The objective of this study was to evaluate the antioxidant activity of the extracts of the avocado seedS (Persea americana Mill) obtained by different solvents, n-hexane (Hex-PA), dichloromethane (Dic-PA), ethyl acetate (AE- PA) and methanol (MeOH-PA). The antioxidant activity was determined by spectrophotometry in the UV range / visible by the DPPH (2,2-diphenyl-1-picrylhydrazyl) ABTS [2,2'-azino-bis (3ethylbenzothiazolin) 6-sulphonic acid], β -carotene / linoleic acid, total polyphenol and carotenoid contents. The yields of extracts were 7.85% (Hex-PA), 9.3% (Dic-PA), 20.8% (AE-PA) and 46.2% (MeOH-PA). The total phenolic content was 6.54% (Hex-PA), 7.67% (Dic-PA), 18.54% (AE-PA) and 37.33% (MeOH-PA). The results of the total antioxidant activity by the DPPH method were 55.71 µg.g-1 (Hex-PA), µg.g-1 79.44 µg.g-1 (Dic-PA), 196.88 µg.g 1 (AE-PA) and 397.55 µg.g-1 (MeOH-PA) by the ABTS method were 108.69 µg.g-1 (Hex-PA), 187.41 µg.g-1 (Dic-PA), 416.50 µg.g-1 (AE-PA) and 524.12 µg.g-1 (MeOH-PA). The best results were obtained in the MeOH-PA fraction, phenolic compounds (37.33%) and free radical capture, 397.55 µg.g-1 (DPPH) and 524.12 µg.g-1 (ABTS). The results indicate the presence of bioactive substances in the different extracts with potential use in the food, cosmetic and pharmaceutical industries.

Key words: Dermocosmetic, Biomass, Agroindustry, Antioxidant.