ANTIOXIDANT ACTIVITY IN AQUEOUS EXTRACTS OF TERMINALIA CHEBULA STORED FOR SIX MONTHS AT ROOM TEMPERATURE AND AT 4°C USING 1, 1-DIPHENYL-2-PICRYLHYDRAZYL (DPPH) ASSAY

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The objective of this study was to quantitative the Antioxidant activity of the skin of the seeds of Terminalia chebula (T. chebula). The cold and hot extracts were obtained from the powder of skin of the seeds of T. chebula stored at room temperature and at 4° C in monthly interval for six months. The initial Total Antioxidant Capacity (TAC) of cold and hot water extracts were 8.98, 4.0µg/ml dry weights respectively. When the powder was stored at room temperature for a month and the TAC was analyzed, the cold and hot water extracts contained 18.28, 14.20 µg/ml dry weight respectively. When the skin of the T. chebula seed powder was stored at room temperature for 6 months, TAC of cold and hot aqueous extracts were 230.6, 204.10 µg/ml dry weights respectively, While the TAC of cold and hot aqueous extracts of the skin of the seeds powder stored at 4°C for six months respectively were 206.1, 177.0μg/ml dry weight. Extraction of antioxidant activity was better with hot water than with cold aqueous. TAC of the skin of the seeds powder decreased when stored both at room temperature and at 4°C. At 3rd month the decline in TAC of the powder stored at Room temperature was higher than that stored at 4°C. In Siddha Medicine the life span of 'Chooranam' which is prepared from herbs is used for 3 months. However based on these results researchers recommend that freshly prepared powder should be used for the preparation of the 'Chooranam'.