OBTAINING ZEAXANTHIN AND VIOLAXANTHIN STANDARDS FOR HIGH PERFORMANCE LIQUID CHROMATOGRAPHY FROM *SOLANUM PSEUDOCAPSICUM* AND *CAPSICUM ANNUUM*

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Detection and quantification of carotenoids in foods can be carried out by high performance liquid chromatography (HPLC), but analytical standards must be employed. These analytical standards are expensive, some isomers are not available for trade, time consuming between purchase and reception and chemical changes may occur during long transportation. Therefore, the objective of this study was to obtain zeaxanthin present in *Solanum pseudocapsicum* L., also known as winter cherry and violaxanthin from yellow pepper (*Capsicum annuum* L.), for use as analytical standards in foods analysis. It is possible to extract zeaxanthin from corn (*Zea mays* L.), but high content of starch is undesirable, since emulsion is produced in extraction. After sample preparation (extraction and saponification), zeaxanthin and violaxanthin were isolated by silica column. While 50 g of corn can produce 20 µg of zeaxanthin, here, 10 g of *S. pseudocapsicum* yielded 620 µg of zeaxanthin and 30 g of yellow pepper yielded 630 µg of violaxanthin. Analysis by HPLC, revelead zeaxanthin and violaxanthin with purity of 97.9% and 95.5%, respectively. After one year stored in sealed borosilicate glass ampoule under vacuum, in the dark, at -18 °C, no significant change in concentration of zeaxanthin (purity reduced only 1.5%) occured, still allowing them use as analytical standard. Unfortunately, only 82.7% of violaxanthin was successfully recovered. The methodology was feasible for the isolation and purification of analytical standards by HPLC. The analytical standard of zeaxanthin shown stability during storage, but the same not occurred with violaxanthin after one year.