STUDY ON THE ANTIOXIDANT CAPACITY OF SWEET AND HOT SPICE PEPPERS

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Peppers (Capsicum annuum L.) are the most widely cultivated vegetable plant in our country, and depending on the species, they are used for food or food colouring. It is considered one of the most popular spices in the world, thanks in part to the capsaicin, which is responsible for its pungent flavour. Peppers are cultivated, grown and consumed primarily for their gastronomic and culinary properties, rather than for their medicinal properties, but the literature often describes the disease-preventive and health-promoting properties of different types of capsicum. The antioxidant effects of different types of peppers have been well established in several studies. The anti-free radical mechanism of peppers is thought to be due to capsaicinoids, carotenoids and polyphenols. Based on its beneficial properties for medicinal use, we were considered important to investigate it further. Our aim was investigated the antioxidant capacity of sweet and hot spice peppers grown in a foil tent and in open field conditions using the ORAC method. The method is carried out by neutralizing free radicals by antioxidants, during which a fluorescence change occurs. The higher the value, the higher the antioxidant capacity of the sample. From our results, it can be seen that sweet (1.25 TE) and hot (0.78) spice peppers grown in a foil tent had the highest antioxidant capacity of the given samples. The sweet (0.72 TE) and hot (0.45 TE) spice peppers from the open field showed a lower free radical absorption capacity.