

## Abstract

The present study was performed on peels and leaves of seven varieties of orange obtained from Algeria. The results show the presence of phenolic compounds in peels and leaves of different varieties, with varying proportions. Levels vary significantly (\*.  $P < 0.05$ ) depending on the variety of orange and the nature of plant part studied (peels or leaves). Whatever the considered plant part is, Bigarade has the highest levels of total phenols followed by Thomson. Among all the varieties, Bigarade presents the highest capacity to slow the rate of oxidation of linoleic acid and  $\beta$  carotene (77%) followed by Portugaise (71%). On the other hand, the results show that the antiradical activity varies from 58.48 to 92.55% for leaves and 55.46 to 88% for peels. We also note that Bigarade presents the highest antiradical activity