



RIPAGA

TRIALS ON APPLE BY





WHO IS CREA



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Born in 1850, CREA
(<https://www.crea.gov.it/en/home>) is the most
important reasearch Italian Center linked to
agriculture and livestock, duly recognized by
Italian government and part of European research
network:

- **12 research center**
- **1520 technicians**
- **From 2018 awarded with**
Human Resources Excellence in Research
By
European commission

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RIPAGA TRIALS

- **FARM: PIERETTI**
- **LOCATION: PIETRAVAIRANO (CE)- ITALY**
- **CROP: ROYAL GALA PLANTED IN 2006 GRAFTED ON M26.
4x1,20 MT**
- **NUMBER OF APPLICATIONS : 2**
- **APPLICATION DATE: 27/07/2021; 10/08/2021**
- **DOSAGE: 250ML/100 LT OF WATER**
- **SAMPLING: 20 X3 APPLES HAVESTED THE 24/08/2021**

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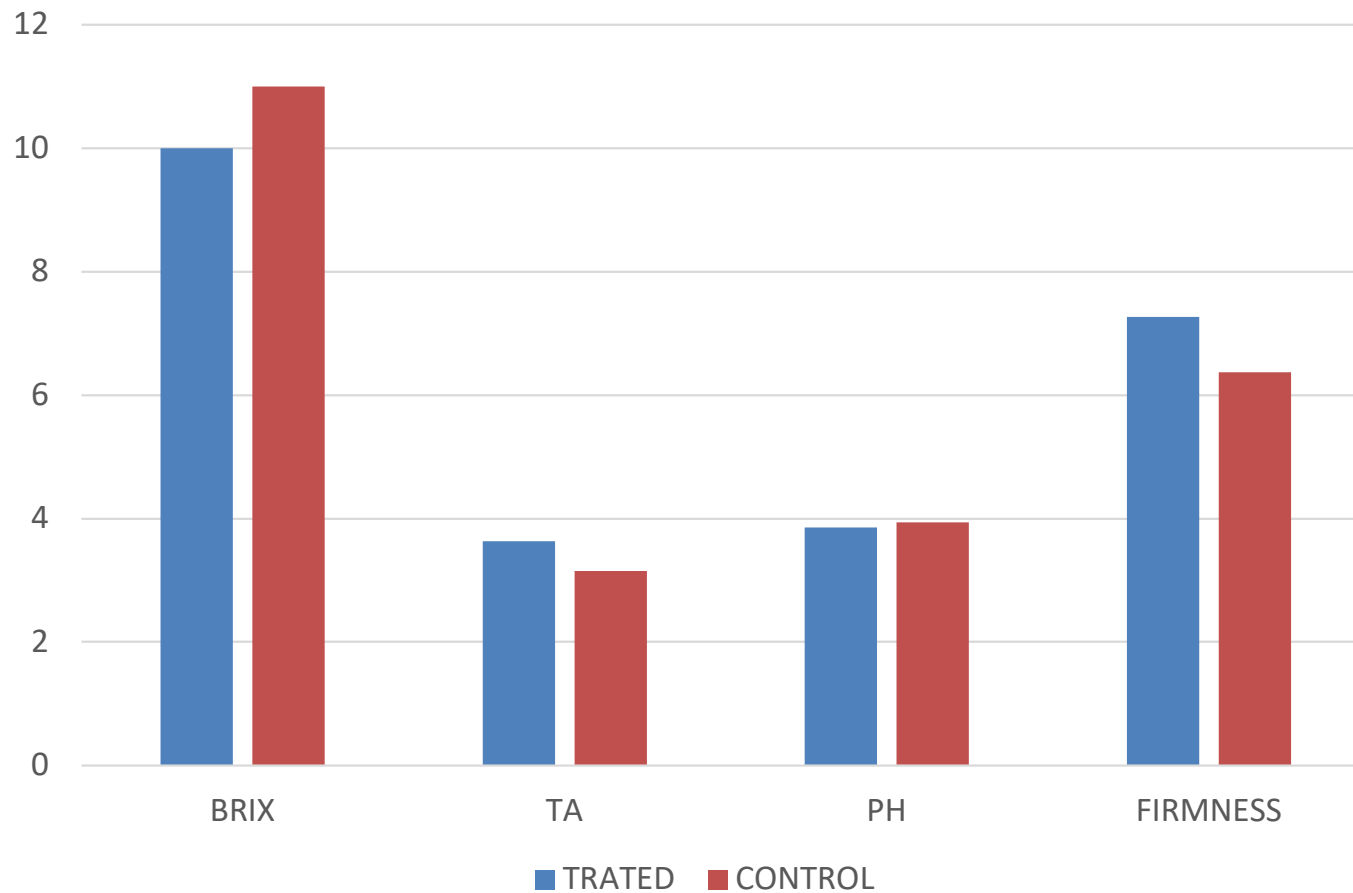


Evaluation of physico-chemical parameters

- **Color of the fruit: colorimeter Minolta CR5 with CIELAB method**
- **Refractometric dry residue expressed in °Brix**
- **Acidity expressed as mg malic acid/L**
- **Fruit firmness: Fruit Firmness Tester, Turoni with 8mm tip with result in Newton**
- **Total polyphenols (TP): colorimetric method of Folin-Ciocalteu (singleton et al. 1965)**
- **Flavonoid content (FLAV) : Adiletta et al. Method (2019)**
- **Ascorbic Acid (AA): Mallik & Singh method (2005)**
- **Anthocyanin content (ANT): spectrophometric method (Magri et al. 2020)**
- **Antioxidant action: Adiletta et al method (2020)**



PHISICAL DATA:

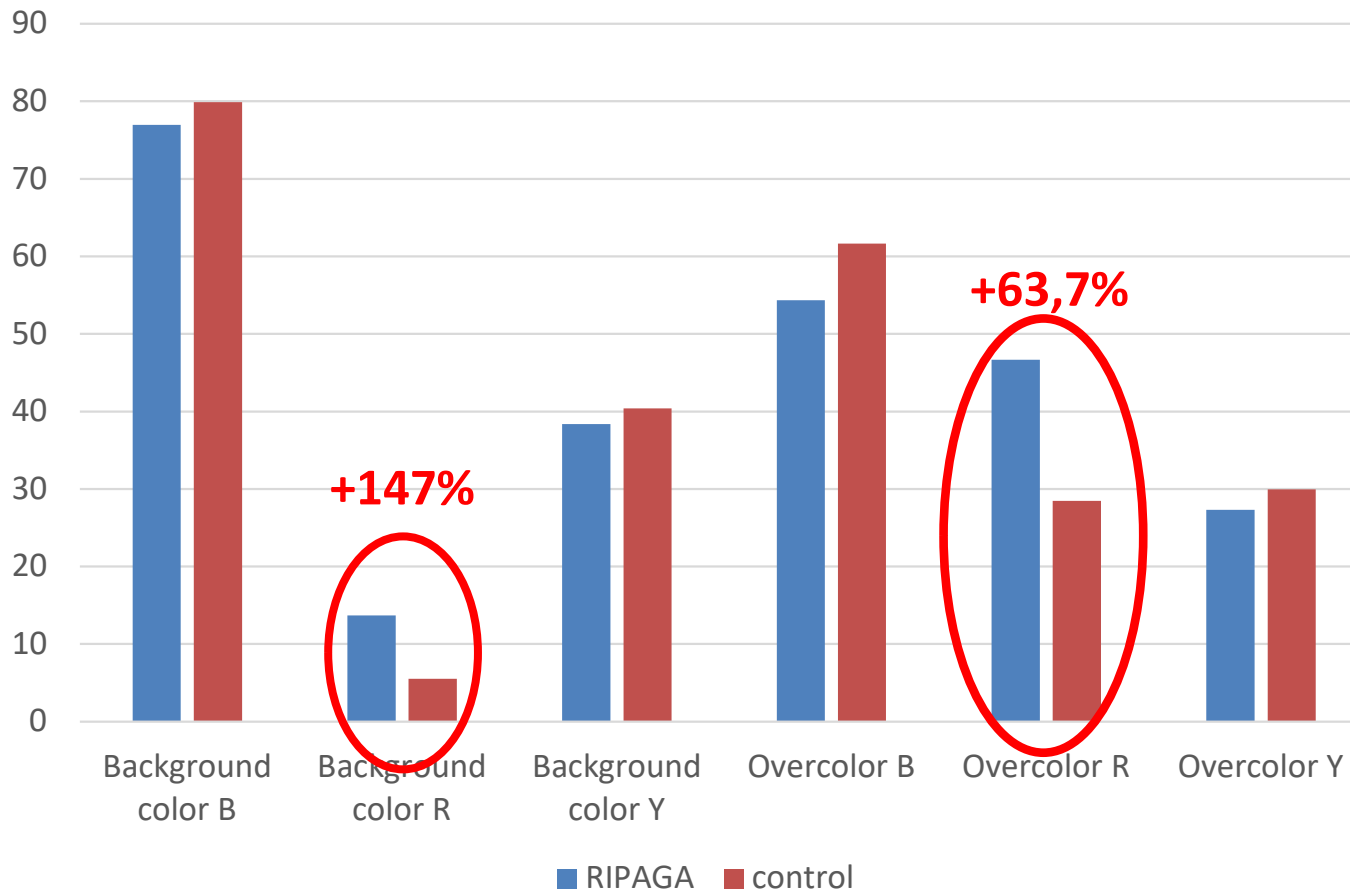


**RIPAGA
RESPECTS
THE
PHYSICAL
DATA
OF THE
CROP**

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COLOR



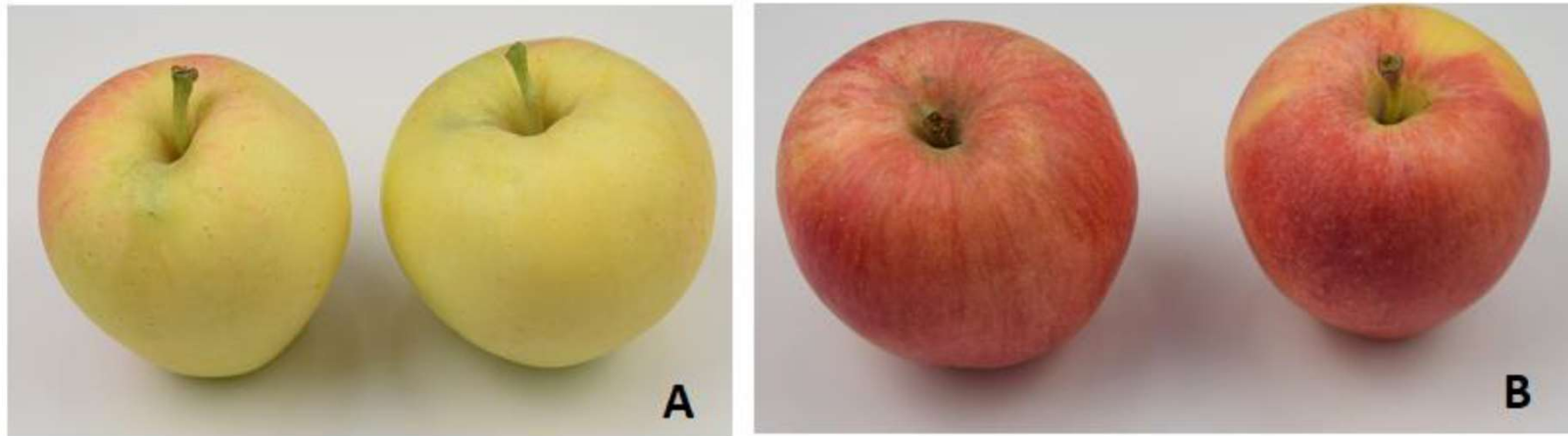
B = brightness
R= red
Y= yellow

Ripaga
mantains
Same
brightness
Increasing of
105%
The red color as
average value

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COLOR

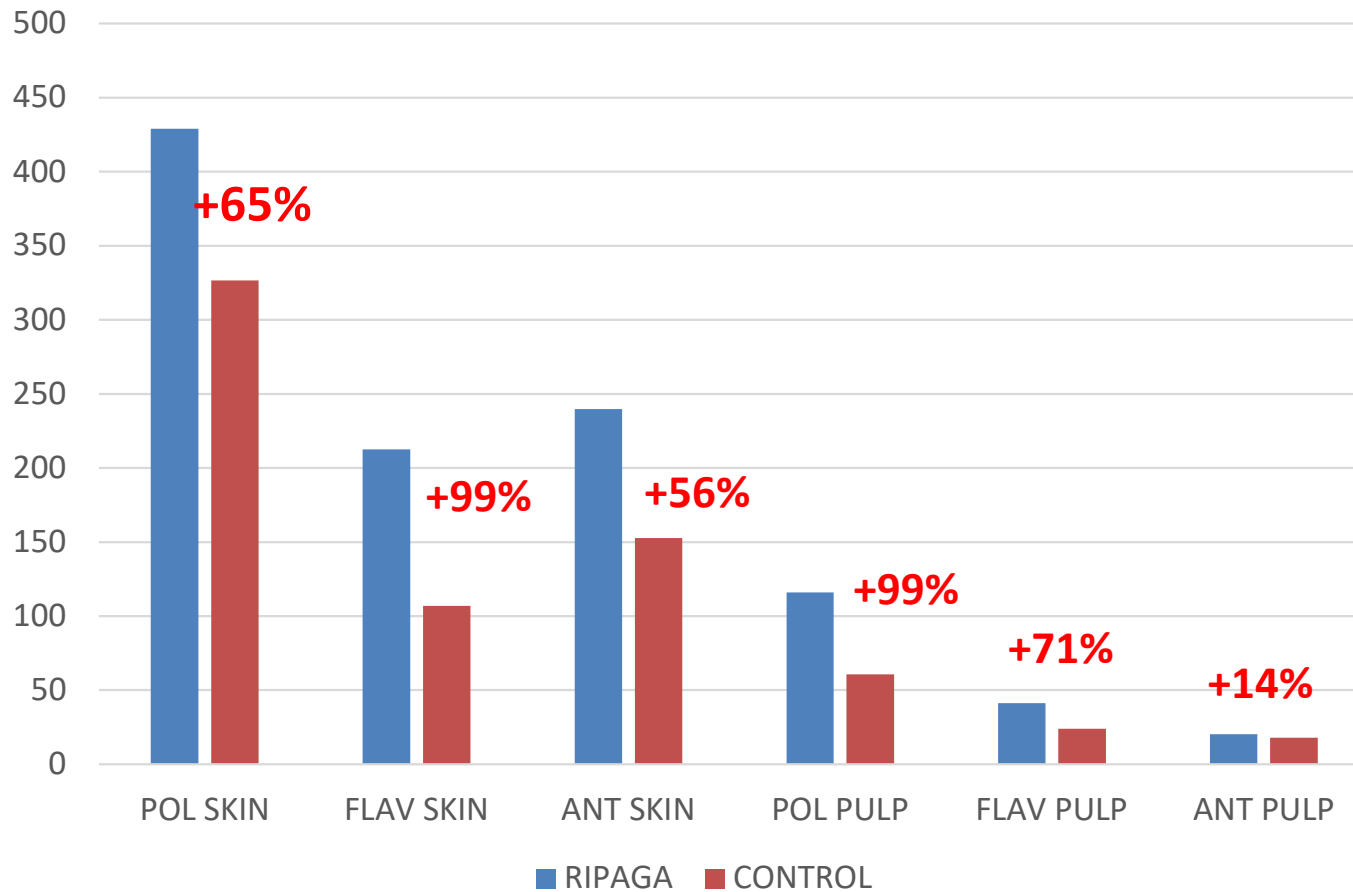


**RIPAGA improves the red color direction both in background and overcolor +105%,
RIPAGA reduces the incidence of yellow**

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NUTRACEUTICAL PARAMETERS

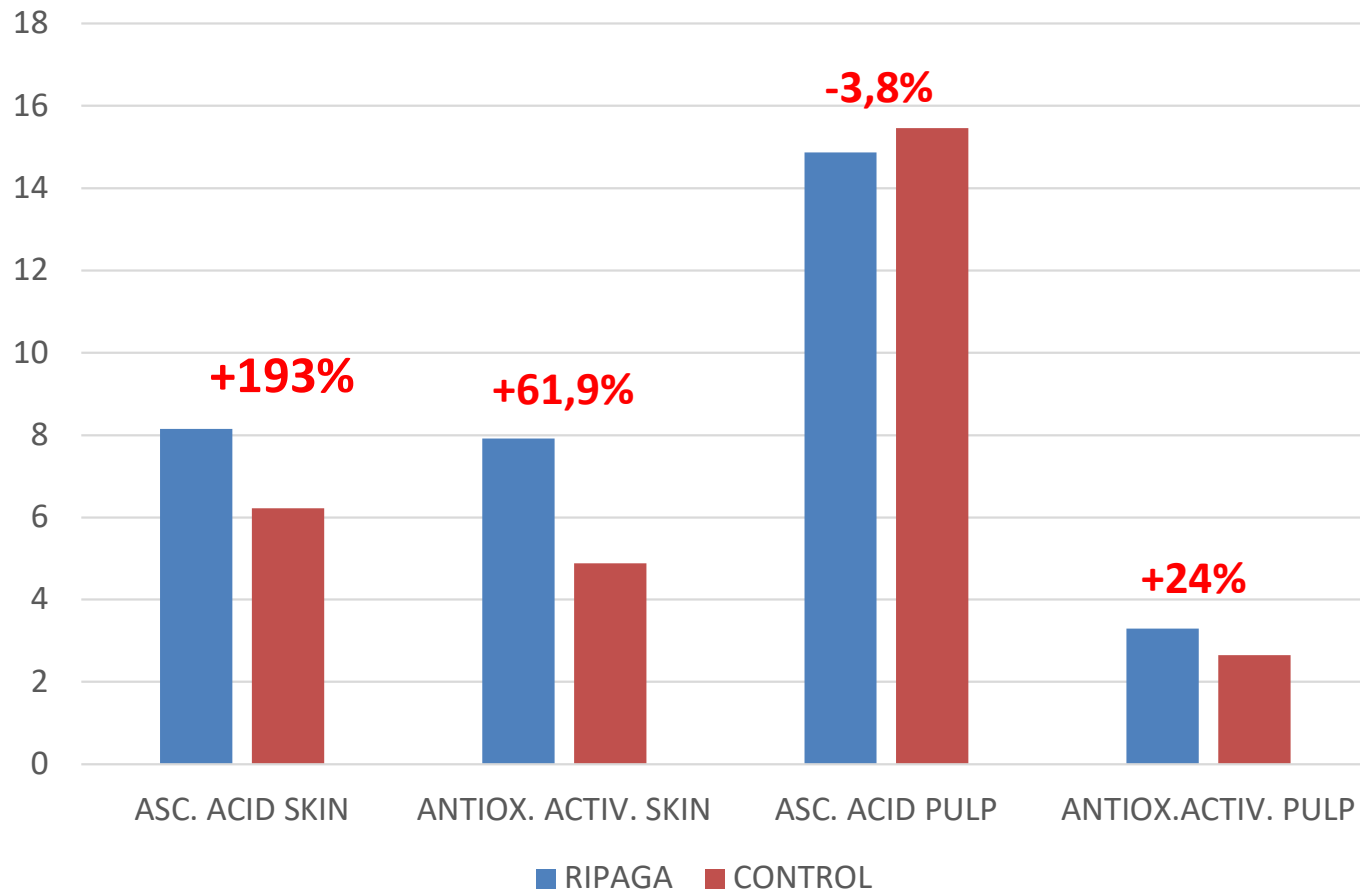


RIPAGA
improves
The nutraceutical
And
pharmacological
Carachteristics of
The apple

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ANTIOXIDANT PARAMETERS



RIPAGA
improves
The antioxidant
activity thanks to
the
improvement of
total quantity of
bioactive
compunds



CONCLUSIONS

The treatment of Royal Gala with RIPAGA determines

- **strong improvement of color**
 - **Strong improvement of nutraceutical parameters**
 - **Strong improvement of antioxidant activity**
 - **Strong improvement of bioactive compounds quantity**
-
- **It is suggested to add a third application since the product does not leave residues**

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