

PROALLIUM DMC

NATURAL EXTRACTS FOR FOOD SAFETY



PROALLIUM DMC

Proallium is a product derived from substances which are present in the plant family Alliaceae. Its organosulfur compounds have great antimicrobial power.

- Preserves and aromatizes without E-numbers - **CLEAN LABEL**
- Very **broad antimicrobial spectrum** (yeast, mould and bacteria).
- Permits the reduction or elimination of sorbate and benzoate.
- A higher pH (around pH 7) does not affect the antimicrobial effectiveness.
- A reduction of thermal processes can be considered.
- Declaration as flavoring

PROALLIUM DMC

- **Proallium** can be applied in:
 - **Sauces and dressings:** Ketchup, mayonnaise, aioli, curry sauce, ethnic sauces, mustard, pesto's,...
 - **Ready-to-eat meals:** Prepared salads, pasta fillings, prepared meals...
 - Any product with **savory and/or well pronounced flavor profile.**



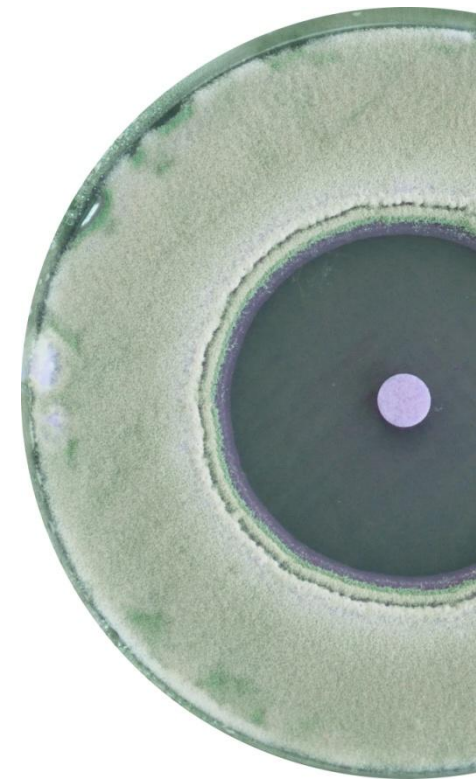
ANTIMICROBIAL ACTIVITY OF PROALLIUM

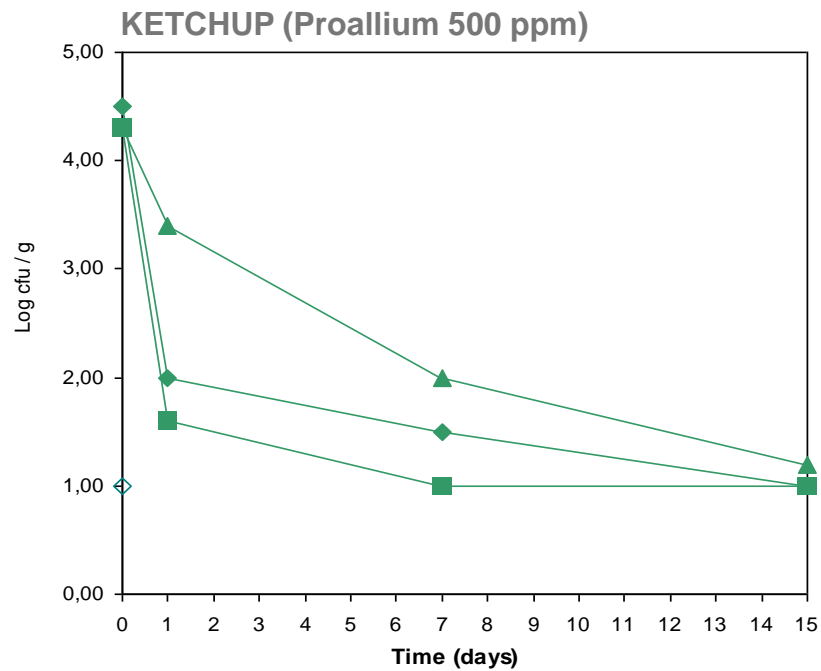
Kirby Bauer Method

PROALLIUM
DMC
500 ppm

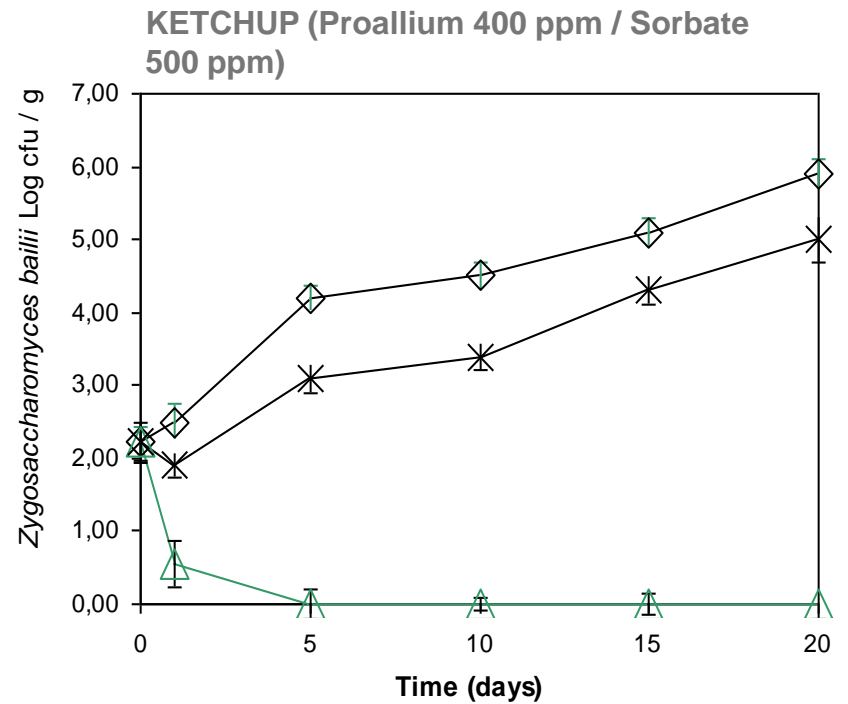
<i>Listeria monocytogenes</i> CECT 4032 serotype 4b	45
<i>Bacillus cereus</i> CECT 148	34
<i>Bacillus megaterium</i>	31
<i>Lactobacillus sakei</i>	26
<i>Staphylococcus aureus subsp. aureus</i> CECT 976. Enterotoxin A	22
<i>Salmonella enteritidis subssp. enterica</i> CECT 443	16
<i>Escherichia coli</i> H157:H7 CECT 4972	21
<i>Yersinia enterocolitica</i> IP383 serotype O:9	22
<i>Campylobacter jejuni</i> CECT 7572	15
<i>Pseudomonas aeruginosa</i> CECT 118	15
<i>Enterococcus faecalis</i> ATCC 29212	20
<i>Zyosaccharomyces bailii</i> DMC 03	21
<i>Penicillium digitatum</i> CECT 2954	30
<i>Penicillium italicum</i> CECT 20332	35
<i>Aspergillus niger</i> DMC 15	29

* Numbers in the table give diameter (mm) of inhibition of microbial growth in surrounding of Proallium in a Petri plate.





◆ *Salmonella enteritidis* ■ *Listeria monocytogenes*
 ▲ *P. expansum*

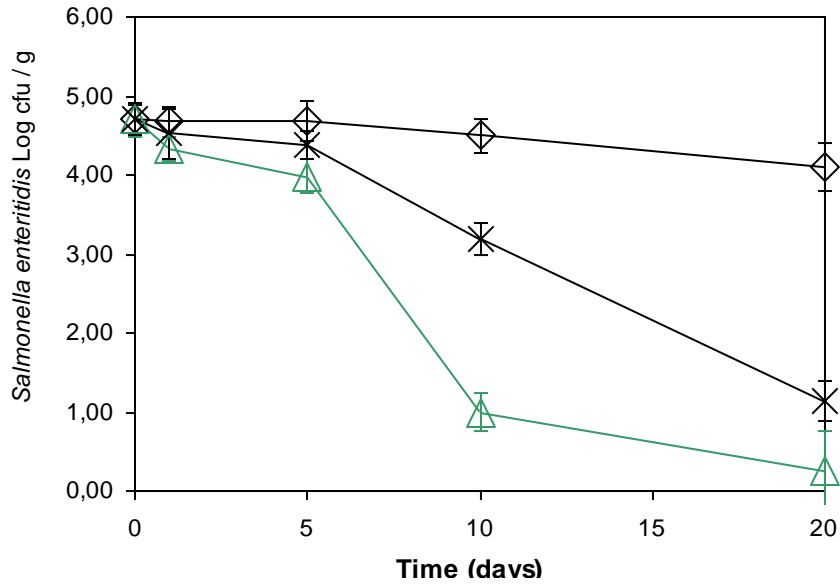


◇ CONTROL ▲ PROALLIUM S LÍQUIDO + SORBATE

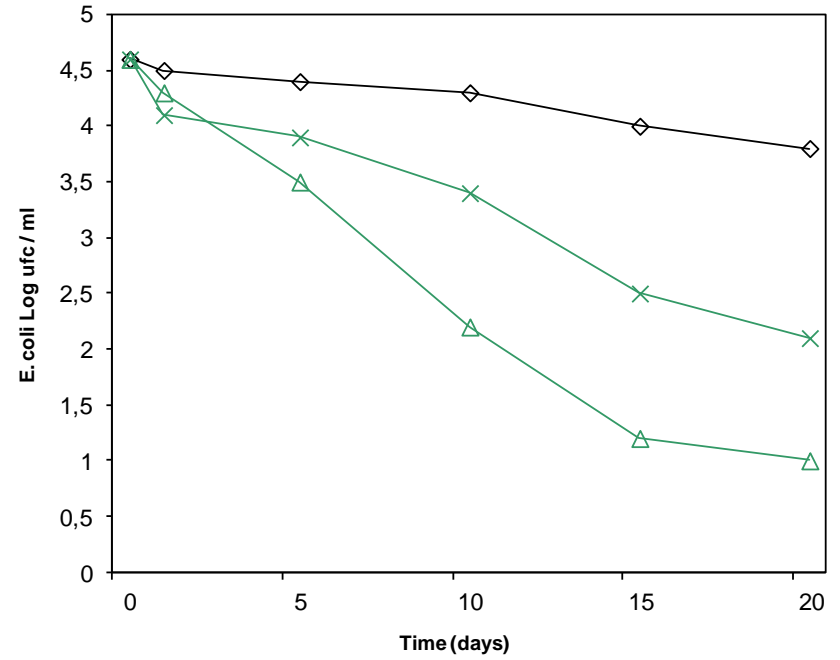


SAUCES

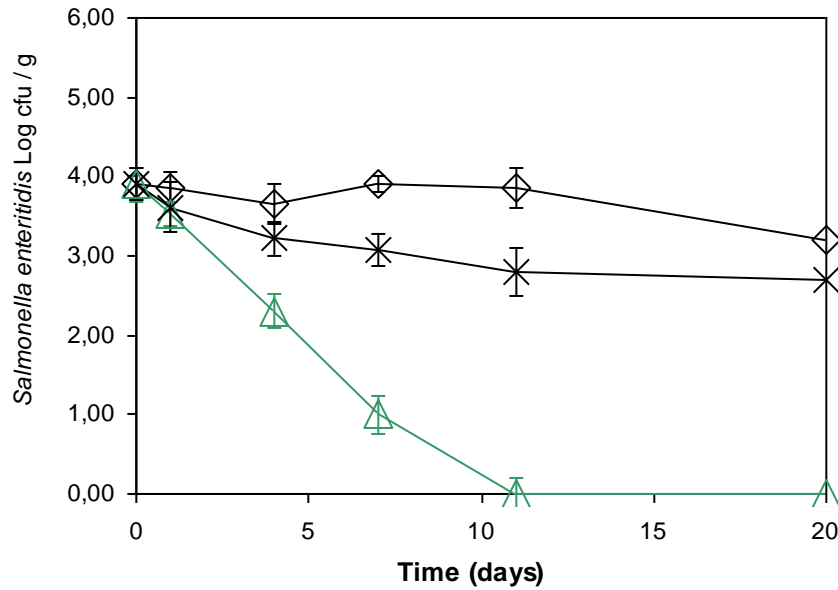
GARLIC SAUCE



MAYONNAISE



MAYONNAISE



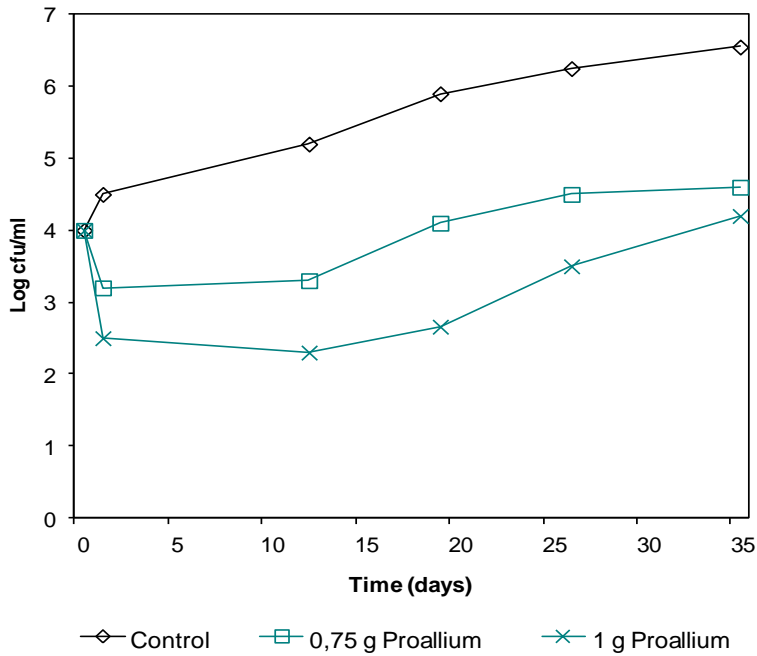
- ◇ Control
- △ Proallium S líquido (400 ppm)
- × Sorbato (500 ppm)



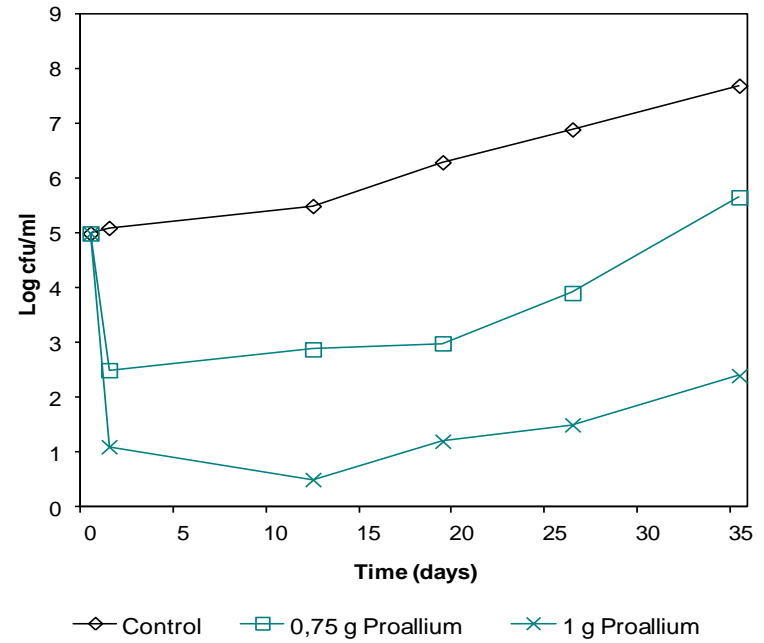
SAUCES

GUACAMOLE

Total aerobic mesophilic counts



Total moulds and yeasts



SAUCES

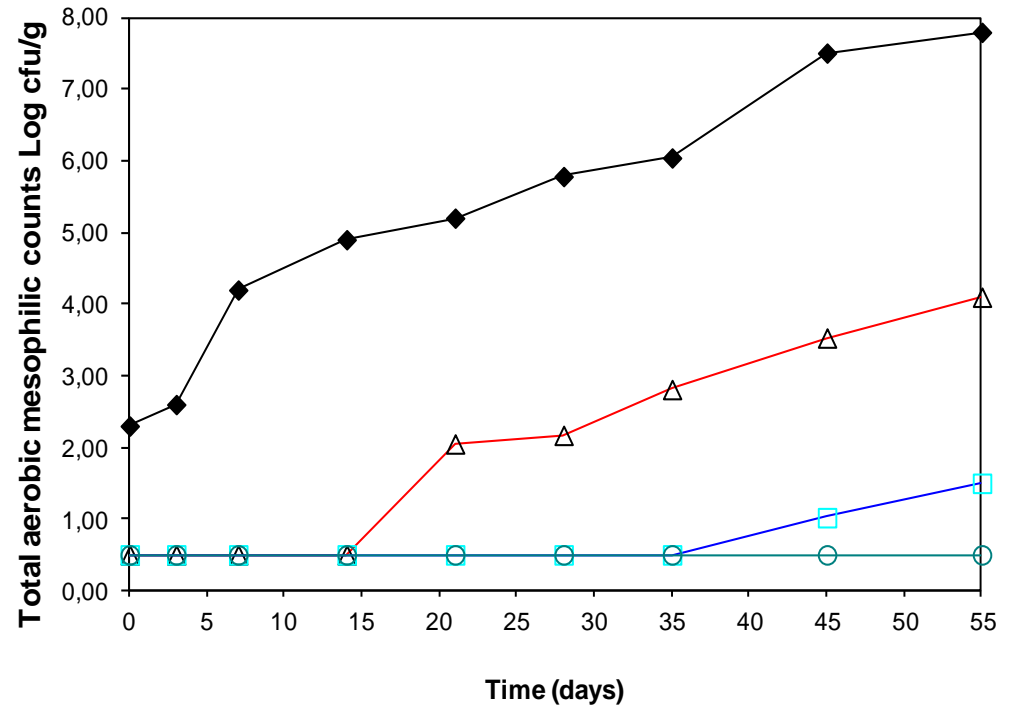
Strong heat treatments affect the nutritional and sensory properties of the food.



ADDITION OF PROALLIUM ALLOWS SMOOTHER HEAT TREATMENT



SHELF LIFE EXTENSION

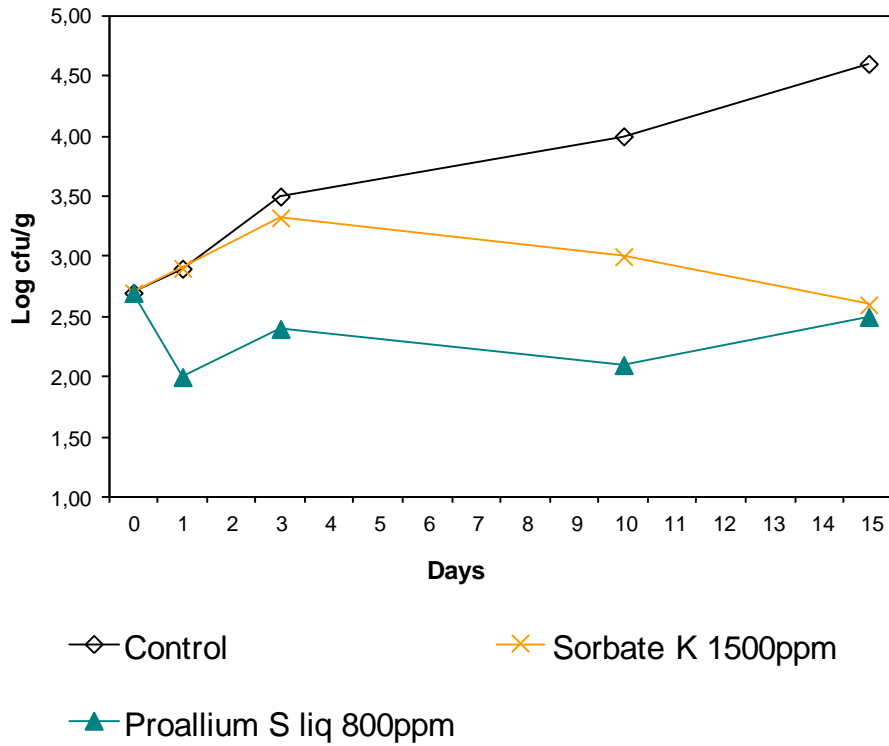


- ◆ Control
- △ 75°C / 50 seg
- 75°C / 50 seg + 250 ppm Proallium
- 75°C / 50 seg + 350 ppm Proallium

SAUCES

HUMMUS

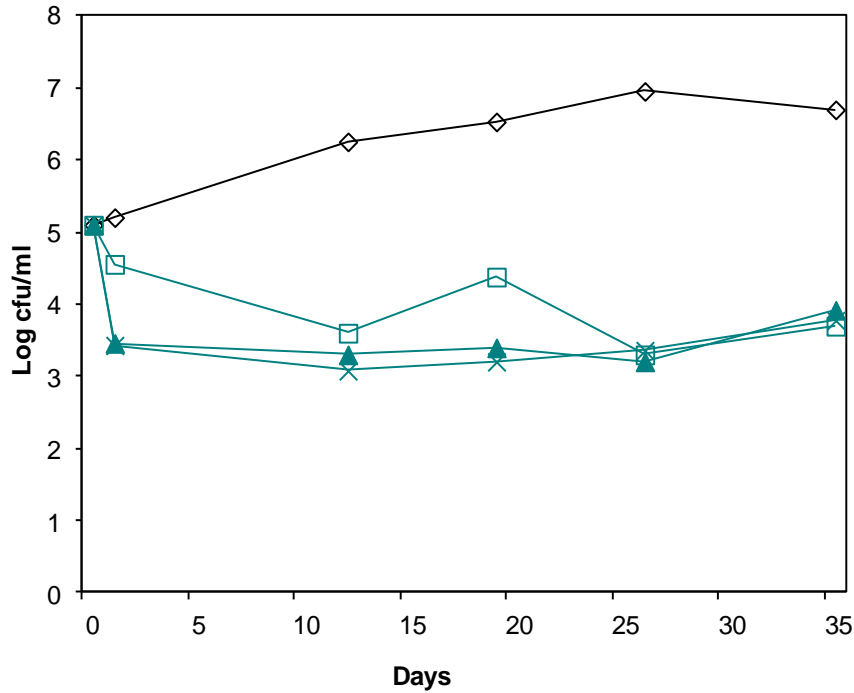
Total aerobic mesophilic counts



READY-TO-EAT

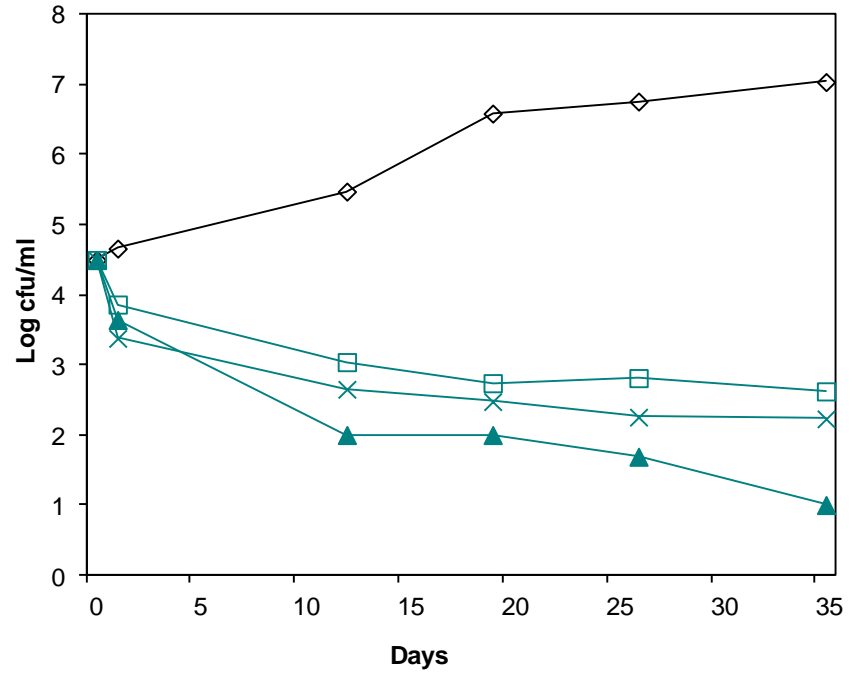
GAZPACHO

Total aerobic mesophilic counts



◇ Control □ 0,75 g Proallium
× 1 g Proallium ▲ 1,5 g Proallium

Total yeasts and moulds

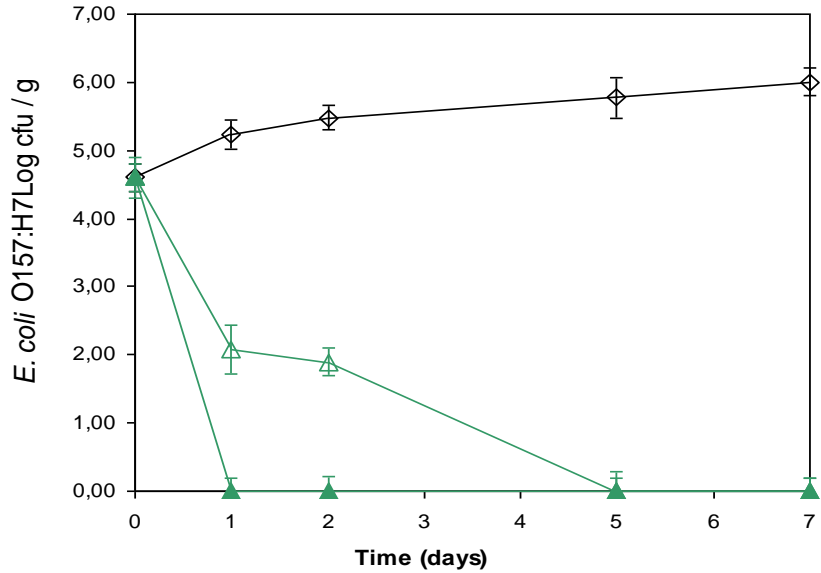


◇ Control □ 0,75 g Proallium
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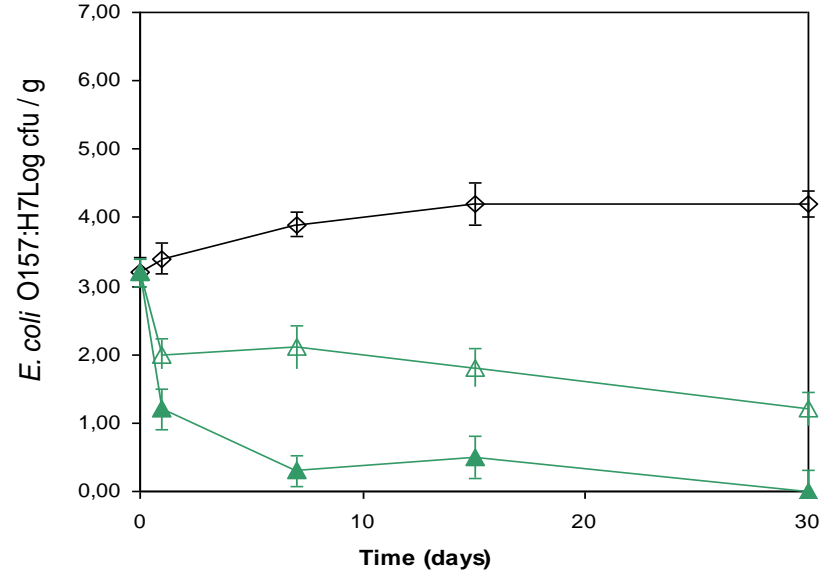


READY-TO-EAT

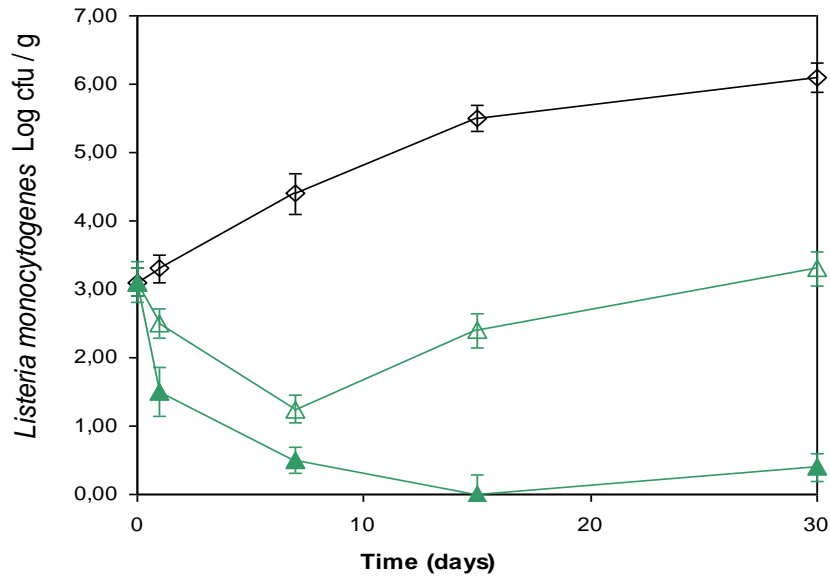
SOYBEAN SPROUTS



CARROT



BEEF

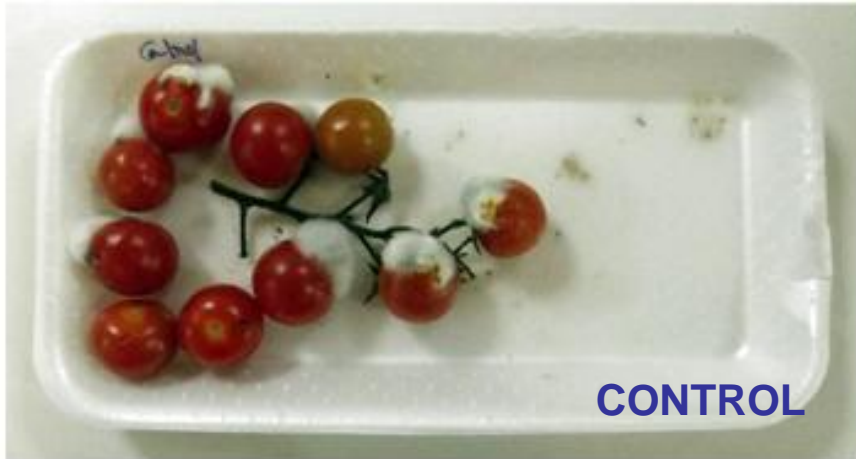


◇ CONTROL ▲ PROALLIUM ▲ PROALLIUM



VEGETABLES

CHERRY TOMATOES: CHALLENGE TEST



Rhizopus stolonifer

VEGETABLES

PROALLIUM DMC

- Different products are available:

- **Proallium DMC**: 0,2-1 g/kg. Standard product in powder form. Declared as flavouring. Shelf life: 12 months
- **Proallium S líquido**: 0,2-1 g/kg. Standard product in liquid form. Declared as flavouring. Shelf life: 6 months
- **Proallium Evolution DIL**: 0,5-5 g/kg natural extract in liquid form. Declared as natural flavouring or garlic extract. Shelf life: 12 months
- **Proallium Evolution Onion**: 0,05-0,5 g/kg natural extract in liquid form. Declared as natural flavouring or onion extract. Shelf life: 9 months



DOMCA

w w w . d o m c a . c o m

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