



# Squadron

Contains live plant growth promoting bacteria & spores:

*Pseudomonas fluorescens*  $1 \times 10^9$  CFU/mL (equiv.  $1 \times 10^{12}$  CFU/L)



Naturally occurring bacteria that aid in plant growth and help your plant protect itself from frost.

Description: Squadron contains the live organisms and spores of the beneficial bacteria *Pseudomonas fluorescens*. This bacteria pre-emptively colonises the leaf surface and root zone and produces natural metabolites that protects that plant against frost stresses and better influences the ratio of beneficial to non-beneficial organisms.

## Benefits:

- ✓ NASAA Certified Organic Input
- ✓ Powerful plant growth promoting bacteria
- ✓ Powerful frost protection
- ✓ Produces healthier plants
- ✓ Increase yields and quality
- ✓ Aids plants to become are more tolerant to biotic and abiotic stresses



Available in 20L drums and 1000L IBCs

NO withholding period

# Application Rate

<b>Foliar Spray</b>	8-10L /ha For best results apply with sticker
<b>Fertigation</b>	15L /ha
<b>Drench</b>	10% solution at or prior to planting

**Application to plant:** to be applied to plant surfaces to ensure coverage of both top and bottom of leaf surface and stems to provide an inoculating dose of beneficial bacteria to the soil plant. Ensure full and even coverage of the plant surface. Bacteria will not survive in direct UV sunlight, so it is best to apply after sunset. This will ensure 8 – 12 hours of colonisation before sun rise. Best temperatures for survival is 4 – 32 °C.

**Application to Soil:** to be applied to soil surface to provide an inoculating dose of beneficial bacteria to the soil profile. Ensure full and even coverage of soil surface. Bacteria will not survive in UV sunlight and must be watered or cultivated in to move bacteria away from soil surface. Target applications to plant rhizosphere. Best soil temperature for survival is 4 – 32 °C.

**Irrigation:** For several days after application, care should be taken to not wash bacteria from the plant surfaces and soil profile (avoid flood irrigation and applications 1-2 days prior to a weather event)

**Timing:** First application at transplanting with further applications every 2-3 weeks (small crops) or 4 – 8 weeks (all other crops). In ideal conditions, this product can survive on the leaf surface for up to 8 weeks and in the soil for up to 6 months. For frost protection, ensure a foliar application is made 2 – 3 days prior to forecasted frost.

**Food supplement:** Soils with an organic matter content less than 2.5% may require the addition of a food supplement for best results. The bacteria in Squadron prefer a nutrition source with high Nitrogen, we suggest fish emulsion.

**Colonisation:** colonisation is quite rapid and can occur in as little as several hours under suitable conditions, though is generally completed in 2 – 3 days.

**Directions for use:** Ensure compliance with your quality assurance code of practice regarding the use of microbial products before use. It is recommended that accurate written record of the details of each spray application is kept.

**General Information:** This is a biological product. Colour, smell and consistency may vary between batches

**Mixing:** Prior to opening, shake or agitate the container vigorously, then add the required quantity of Squadron to water in the tank while stirring or with agitators in motion. Maintain agitation until spraying is complete.

**Cleaning Up:** Equipment should be thoroughly cleaned by rinsing with water several times. Sanitise tank before and after use.

**Compatibility:** Squadron has been tested for compatibility with various other conventional products including fungicides, insecticides, herbicides and fertilisers. However, as formulations of other manufacturers' products are beyond the control of Novum Lifesciences, all mixtures should be tested prior to mixing commercial quantities. Changes in climatic conditions can alter the sensitivity of plants to mixtures of sprays and Novum Lifesciences cannot be responsible for the behaviour of such mixtures.

**Storage and Handling:** Read safety directions and SDS before use. While handling and applying microbial products personal protective equipment should be worn. Store the original container in a cool, dry place away from direct sunlight and below 35°C. Use as soon as possible after opening but if this cannot be achieved then close immediately after use and use within 3 months. Contamination of contents may occur at any time after opening and Novum Lifesciences takes no responsibility for opened product not used immediately.

**Shelf Life:** The unopened shelf life of this product is 9 – 12 months from Date of Manufacture. Please refer to product Certificate of Analysis for batch details. The shelf-life period relates to the time that the product remains above the guaranteed concentration of  $1 \times 10^9$  CFU/mL. If the product is outside the shelf life, the product may still have viable live organisms and spores (and metabolites), but will no longer be guaranteed to be at the original concentration.

## Terms and Conditions of Sale:

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