## Info Sheet





Res+ is a residue management product for the enhanced breakdown of stubble, stalks, chaff and other degradable plant matter.

Res+ kick starts the microbial activity in the soil to give yield benefit to the newly planted crop.

Res+ is comprised of a residue degrading enzyme combined with a chelated nutrient package, which provides soluble nutrients that feed native microbes and fungi for optimal degradation. A humectant has been added to lock in moisture, speeding up the natural degradation of residue.

Res+ can be added to knockdown or pre-emergent herbicides prior to planting to start the breakdown of stubble and to trigger nutrient release. This provides a nutrient rich soil prior to planting.

#### Why use Res+?

- To aid in the breakdown of stubble as required in minimum and zero-tillage farming systems
- To improve soil health, organic matter and native microbial activity
- To improve nutrient availability from residue breakdown
- To improve crop and pasture establishment following application



#### **Elemental Soil Enzymes**

Think of them as factories for your soil, able to continuously produce the desired nutrient for a number of weeks.

#### **About Us**

Elemental Enzymes®, founded in 2011 and based in St Louis, USA is a life sciences company that creates novel enzyme, peptide and natural solutions that improve soil health, plant health, performance and yield. Our technology and product solutions are applied through seed treatment, foliar applications, tree injection, in-furrow soil treatments, fertiliser coating and fertigation.

#### **Enzyme Definition**

A protein produced by a living organism that acts as a catalyst to bring about a specific biochemical reaction.

#### What We Do

All of our soil enzyme products perform chemical reactions with the same enzymes that are naturally secreted by plants and/or microbes to do the tasks we want them to do, i.e. degrade soil-borne complex molecules into smaller, easier absorbable/digestible molecules.

We just supply them readily, in a higher concentration and more widely distributed throughout the rhizosphere than what microbes and/or the plant root can achieve on their own.

#### **Priming The Soil**

Soil enzymes are applied with fertiliser at planting time. Enzymes get to work immediately, quickly and continuously for a number of weeks creating their specific chemical

The enzymes release and make available nutrients in the area near the seed important to growth. The seed germinates into a rich area of nutrients resulting in better seed emergence and establishment.

### KICKSTART YOUR SOIL HEALTH

#### RES+ Humectant

# Contains plant residue degrading enzyme

glycoside

hydrolase

activity

Enzyme

 Creates entry points for native microbes to feed, kickstarting soil enzyme

#### Locks in moisture on stubble and plant residues speeding

up natural

- Allows
   breakdown
   activity to occur
   under wider
   environmental
- Breaks residues down faster optimising soil health

conditions

#### Product Offer

- Liquid formulation
- Delivered in optimised chelated nutrient package containing 5% nitrogen
- Spray stubbles post harvest or prior to sowing on it's own or with herbicide or UAN

## Info Sheet



#### **DIRECTIONS FOR USE**

- Store optimally at ambient temperature.
  Under these conditions, Res+ will be good for 24 months.
- Shake well before using.
- Add Res+ after all other inputs (fertiliser, herbicide, micronutrients, etc. have been added).

#### **Application Timing:**

For best results, apply to residue in the field as a spray solution before 0 to 4 weeks planting. Can also be applied post-harvest.

#### **Application Method:**

Liquid broadcast directly onto stubble.

#### **Delivery Methods:**

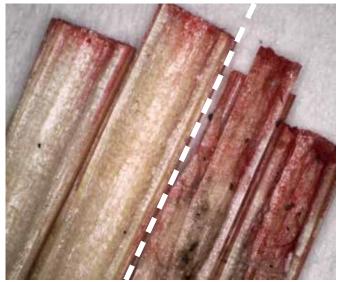
Broadcast application with preferred carrier; water or UAN. Can be mixed with pre-emergent or knockdown herbicides.

Rate: 1.2 L/ha

#### **Compatibility:**

Res+ is non-phytotoxic and compatible with many commonly used foliar treatments including insecticides, fungicides, micronutrients, zinc, biostimulants, fertilisers and herbicides.

Split untreated wheat stubble



#### **MODE OF ACTION**

Optimal Nutrient Blend for Feeding Residue Degrading Microbes

7 days after application

Split stubble, with Res+ treatment

Wheat stubble stained to show exposed cellulose (red) where microbes are able to access the carbon (lignin, cellulose). Note the increase in the red staining on the Res+ treated stubble. The red dye shows the actual degradation of cellulose caused by the enzyme. The enzyme creates more "entry points" for improved degradation of the stubble by microbes.



PO Box 131, Ivanhoe, VIC, 3079 Australia

The information provided in this Info Sheet is an extract and does not constitute the full Directions for Use. PLEASE READ THE PRODUCT LABEL THOROUGHLY BEFORE USE.



Ph: 1800 691 440

Elemental Enzymes Australia