

fluid focus

product information



Fluid focus No. 0011

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Kelpak: Get the most out of your Zinc seed dressings

Are you using zinc seed dressings? Do you want to get the most out of your products? Do you want to give your broadacre crops the best chance of survival under drought and stress conditions?

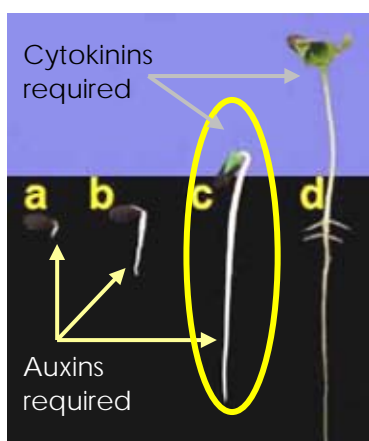


A vigorous root system is vital for any seedlings' survival and can be the difference to increasing yield even under drought conditions. The growth rate of a seedling depends on the ability it has to uptake moisture and nutrients through its newly developed root system. Therefore it is advantageous to any seedling to help speed up growth of new roots.



Farmer standard vs Broadacre Zinc and Kelpak seed dressing on corn

Kelpak is a liquid extract of the fastest growing seaweed in the world – *Ecklonia maxima*. It is uniquely produced using the 'cold cell burst method' which makes Kelpak the highest growth hormone content product on the market. Although Kelpak contains both growth hormones, auxins and cytokinins, it is auxin – dominant. The auxins present in Kelpak are responsible for cell elongation and enlargement and are directly linked to the development of adventitious roots. Cytokinins help slow down crop senescence and increase photosynthesis as they are directly linked to shoot growth. As Kelpak is an auxin dominant product it is an excellent root growth accelerator. Roots are the factory for cytokinin production and as they are the growth hormones responsible for shoot growth, increased root growth = increased shoot growth.



Root development of a cotton seedling, note almost 100% more root growth is occurring up to stage c when shoot growth and root growth balance up

Adding Kelpak in with a seed dressing can help the plant to recover after stress situations such as drought or disease. The auxins and cytokinins encourage new cell development of both roots and shoots which help the plant utilise available moisture or increase photosynthesis through new growth.

Kelpak can be used in conjunction with any zinc seed dressings or as a seed dressing on its own to accelerate root growth. Adding Kelpak to a zinc seed dressing will accelerate the uptake of zinc through a more vigorous root system.

When dressing seed with any zinc product add Kelpak at 400 – 800 mls/ T.



Kelpak and Zinc seed dressing compatibilities

Kelpak is compatible with most commonly used broadacre zinc products. Trials have shown that the minimum effective application rate of Kelpak with a zinc seed dressing is 10% Kelpak. This rate under most conditions will show a visual increase in lateral root growth of seedlings and increase the nutritional benefits that a zinc seed dressing gives to the plants. Agrichem's Broadacre Zinc and Broadacre 30-30 already have 10% Kelpak in the mix as a germination booster.

Kelpak can be applied directly on the seed with the zinc seed dressing or foliar applied with most broadacre zinc products. For the compatibility of any broad acre product with Kelpak please contact your local agrichem rep or the agronomy team.



Kelpak solution straight from the drum



Twin Zinc and Kelpak mixed at 1:10 ratio



Kelpak 10% and Twin Zinc 4L/T on wheat seed

Compatibility of Kelpak with Zinc seed dressings

	Ratio of mix	Compatibility of mix
Kelpak + Twin Zinc neat	1:10	Compatible
Kelpak + Twin Zinc neat	1:1	Not Compatible
Kelpak + Zinc sol neat	1:10	Compatible
Kelpak + Zinc sol neat	1:1	Not Compatible
Kelpak + Activist Zinc neat	1:10	Compatible
Kelpak + Activist Zinc neat	1:1	Compatible

Kelpak = increased yield even under drought conditions

A trial was conducted on wheat last season aiming to increase yield using Kelpak as a seed dressing. Due to drought conditions the season ended poorly with lower than average yields. However, the trial still showed that the addition of Kelpak as a seed treatment increased yield by 6% over the control. A visual inspection 3 weeks after sowing showed that the Kelpak treated plants were more vigorous and had a larger root system than the control plots.

Trial Wheat Quirindi NSW 2006

