

Article written January 2006

By Dan Sutton BSc  
Technical Advisor for  
Eco-Growth International Pty Ltd

This season has resulted in lush canopies, some early leaf discoloration, large bunches on many varieties and increased concern of splitting and Botrytis.

Remember the thunderstorms we had earlier in the season? In nature plant available nitrogen naturally occurs in two ways; legume-microbial association, and *Lightning!* As 78% of our atmosphere is gaseous nitrogen, its not surprising we get lush growth when N converted by lightning and delivered by rain.

Another quirk of this season has been the unseasonably cool weather and lateness of the season. Vine roots have been slow to mobilise Phosphorous early in the season with many vines still standing in water past bud burst. Worse has been the potassium leaching.

Un-seasonal rain this year has washed away much of the spring applied potassium; *this has not been compensated for in vine programs.*

Potassium is essential to maintain skin firmness and grape quality. Without nutritional balance grapes easily blow out and become soft. Thus nutrition is very closely allied to disease control. A piece of trivia, Potassium also influences skin quality by blocking the uptake of Sodium – ever wonder why the chloride levels creep up in petioles when the potash level is low? –Sodium Chloride is still present in non-saline soils, but is normally immobilized by humus and good potash levels.

When choosing how to apply Potassium, consider the following:

- Too much potash is bad as it reduces grape acidity; therefore avoid large applications especially of harsh forms such as chlorides.
- Use soft forms such as chelates, silicates and sulphates, these are less leachable and do not tend to force excess take up, but are available for longer into the growing season with less top-ups required.
- Foliars should be buffered for gentle absorption.

Eco-Growth's Direct PK and Direct K are a chelated formulation designed for fast gentle uptake by fertigation or direct foliar uptake. Fast absorption means grape quality can be influenced right up to the final stages of bunch development.



Contact your local Eco-Growth stockiest for more information