

PRIPRAVKA DRUŽBE BASF NA OSNOVI NOVE AKTIVNE SNOVI BOSKALID, CANTUS IN COLLIS

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Razvoj novih aktivnih snovi v fitofarmaceutskih pripravkih je usmerjen v iskanje takšnih, ki zatirajo večje število bolezni in se uporabljajo v številnih kulturah. To je pomembno predvsem pri t.i. malih kulturah kot je vinska trta, sadno drevje in zelenjava. V družbi BASF so razvili aktivno snov boscalid s specifičnim mehanizmom delovanja na patogene glive in možnostjo uporabe v številnih kulturah v sadjarstvu, vinski trti, poljedelstvu in zelenjadarstvu. Fungicidi, kombinacije aktivne snovi boscalid z drugimi aktivnimi snovmi družbe BASF, omogočajo razširitev in izboljšanje učinkovitosti delovanja takšnih pripravkov na bolezni rastlin. Pripravek Cantus je namenjen zatiranju sive grozdne plesni vinske trte (*Botrytis cinerea*) in čopičastih plesni (*Penicillium* spp.). Za zatiranje sive grozdne plesni je na voljo manjše število botriticidov. Vsak novi pripravek, ki ima drugačen mehanizem delovanja od poznanih pripravkov, takšen je Cantus, je pomemben za pridelovalce grozdja pri zatiranju sive grozdne plesni posebej pri načrtovanju antirezistenčne strategije zatiranja bolezni. Cantus, uporabljen za prvo škropljenje zatiranja sive grozdne plesni, zadovoljivo zatira tudi oidij vinske trte in sekundarne bolezni *Penicillium* spp.. Kombinirane pripravke, kot je Collis, zaradi antirezistenčne strategije, praviloma sestavljajo aktivne snovi z različnim mehanizmom delovanja. Aktivni snovi, ki jih vsebuje pripravek Collis, sestavljata boscalid in kresoxim metil. Imata različne mehanizme delovanja na patogene glive. Collis je v Sloveniji registriran za zatiranje oidija vinske trte (*Uncinula necator*). Uporaba je priporočena v obdobju največje nevarnosti pojava te bolezni.

Ključne besede: boscalid, fungicidi

ABSTRACT

NEW BASF FUNGICIDES CANTUS AND COLLIS BASED ON BOSCALID ACTIVE SUBSTANCE

New plant protection products are most often developed for large crops rather than for crops with smaller application potential, such as the diverse fruits and vegetables. With boscalid, BASF has been successful in developing a new fungicide active ingredient with a new unique mode of action for use in a wide spectrum of crops for many fruits and vegetables, grapes, turf and various agronomic crops, for example oilseed rape/canola. Through the combination of boscalid with other BASF fungicides, it is possible to broaden the activity spectrum and to thus round it off. The result is a family of products that offers an unusually wide spectrum of activity and one which meets the performance level of the most modern fungicides currently available. Boscalid inhibits the enzyme succinate ubiquinone reductase, also known as complex II, in the mitochondrial electron transport chain. Like the other complexes of the respiratory chain (I, III and IV), this enzyme is a component of the inner mitochondrial membrane. However, it does not function as a proton pump and its relatively simple structure consists of only four nucleus-encoded sub-units. Two of these polypeptides anchor the complex in the membrane whilst the others project into the mitochondrial matrix where they catalyse the oxidation of succinate to fumarate as part of the tricarboxylic acid (TCA) cycle. The electrons so released are channelled into the electron transport chain via the co-substrate ubiquinol (QH₂). Efficacy of boscalid against *Botrytis cinerea* and *Penicillium* spp. in grapes, product CANTUS. To control *Botrytis cinerea*, grape growers have access to a limited number of effective active ingredients. With its new mode of action, boscalid is extraordinarily effective and also controls strains that have developed resistance to other products. With application of boscalid at the customary timings for Botrytis control, an additional powdery mildew treatment becomes unnecessary, because boscalid is also active against this fungus. Secondary diseases such as Penicillium rot, dreaded in wine grape culture, are also controlled. Boscalid provides the basis for a pure, healthy wine. Efficacy of boscalid plus kresoxim-methyl against *Uncinula necator* and *Botrytis cinerea* in grapes, product COLLIS. In the combination boscalid plus kresoxim-methyl, two different modes of action for the control of powdery mildew are united. The result is, that in addition to the extraordinary mildew activity in grapes, vegetables and ornamentals, an especially good residual activity has been observed. The combination boscalid and kresoxim-methyl is an important instrument for resistance management and is ideal for integrated pest management programmes.

Key words: boscalid, fungicides, disease control

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