PROMALIN – a new liquid plant growth regulator for more marketable fruit

PROMALIN has shown to give improvements in fruit yield and quality over standard gibberellins, particularly in responsive situations, e.g. poor blossom/fruit set and high russet risk.

The April cold spell strengthens the case for PROMALIN, especially in Conference pear, Cox and other russet-prone varieties and situations.

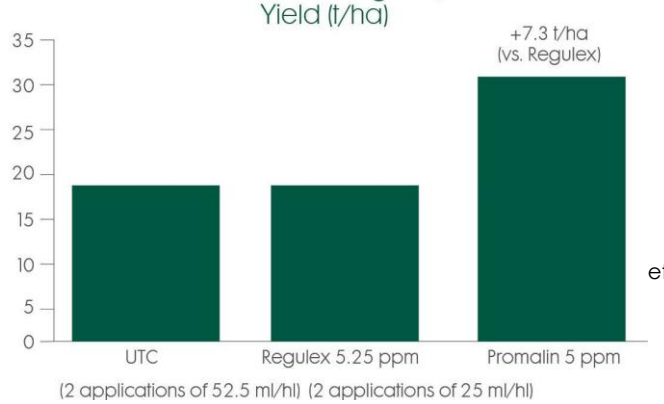
Key features:

- ✓ **Proven benefits** of Gibberellins plus 6-Benzyladenine (cytokinin PGR) at 19 g/l.
  Results show added **fruit set, size and russet control** benefits.
- ✓ The two ingredients in PROMALIN contribute to **increase fruit yield and quality**:
  - 6-BA stimulates cell division
  - GA4+7 causes cell expansion

  These effects only take place during the **very early development of the fruitlet** – the result is leaves and fruit with more cells and larger cells. In addition, the gibberellins help reduce fruit russet and improve overall fruit finish.
- ✓ Widely proven in Europe, **now available in the UK**.

Crop	Directions for use	Rate of use	Minimum interval between treatments
Apple	For fruit russet control and fruit sizing; start applications between full bloom and petal fall and continue at 7-12 day intervals. Earlier applications and shorter intervals are recommended when russet conditions are severe (i.e. long cold wet periods during bloom).	0.25 – 0.5 l/ha	7-12 days
Pear	For fruit set increase; apply from start of flowering to petal fall.	0.25 l/ha	2 days

Field trial results with Promalin – Pear Fruitset 'Conference' – Belgium, 2009

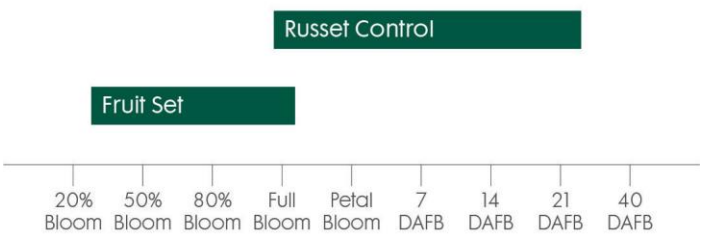


VBC Rep: Michael Schröder
Cooperator: Proefcentrum Fruitteelt v.z.w.
Study 2009MSCHR320

Copr: Pear
Cultivar: Conference
Application Date: April 15 & 20 (BBCH61 & 67)

Site: Wilderen (Sint-Truiden)
Country: Belgium

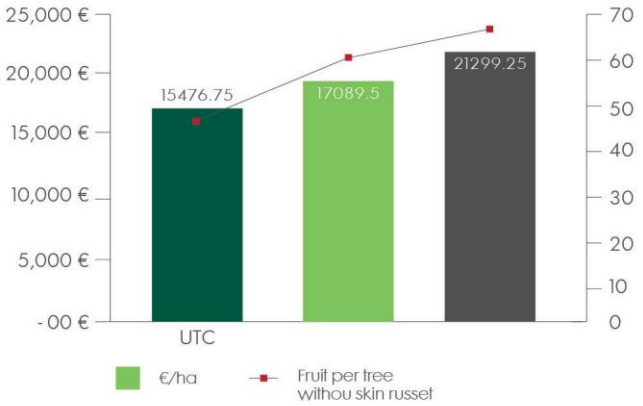
Optimum timings for Promalin



ef: CP/1008 Note: DAFB = days after full bloom
Optimum timings based on 20 year's trials and commercial experience

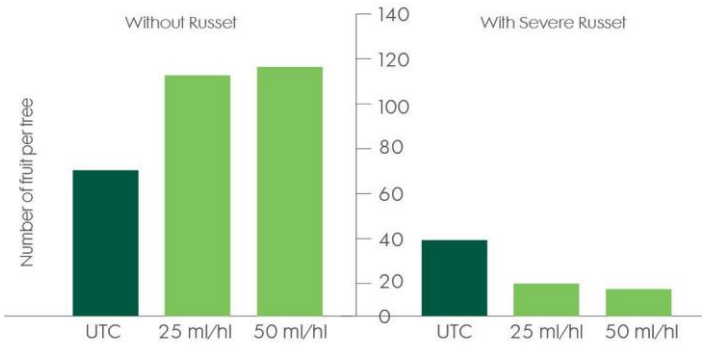
Nufarm

Economic Return (€/ha) & number of fruit per tree without skin russet



Hiebler, Hiebler Ag Engineering Service, Steiermark, Austria
Mean of 4 studies on Arlet (1x) & Golden Delicious (3x)
conducted in 2007 (1x) 2008 (2x) & 2009 (1x)
4 applications from petal fall at 7 to 13 day intervals

Effect of Promalin on Skin Russet
EU Central (NL, BE, AT, DE, North FR)



Mean values from 13 studies in EU Central conducted between 2007 & 2009
Austria (5x), Belgium (2x), France North (3x) &Germany (3x)
Arlet (1x), Coxs Orange (1x), Golden (9x) & Wellant (1x)

- In recent seasons in less-responsive situations in grower and replicated plot trials in the UK, PROMALIN has been found to give comparable responses to standard 100g/L gibberellins, at the corresponding repeat low doses usually advised.
- PROMALIN also offers unique extra benefit of 6BA.

Rate comparison table:

Product/scenario	Rate of use (l/ha)	Gibberellins (g/ha)	6BA (g/ha)
PROMALIN	0.10	1.9	1.9
10% gibberellin – min rate	0.2	2	0
PROMALIN for 2g GA	0.11	2	2
PROMALIN	0.15	2.8	2.8
10% gibberellin – average rate	0.3	3	0
PROMALIN for 3g GA	0.16	3	3
PROMALIN label low rate	0.25	4.75	4.75
10% gibberellin – max rate	0.5	5	0
PROMALIN for 5g GA	0.27	5	5
PROMALIN max rate	0.5	9.5	9.5

FURTHER INFORMATION

Nufarm Technical updates are eligible for 1 BASIS CPT/year Ref: CP/100840/2021/g. Email claim to linda@basis-reg.co.uk

Promalin contains gibberellins (GA4A7) and 6-benzyladenine. Promalin is a trademark of Valent BioSciences LLC.

Details of application rates and timings are given in Nufarm labels and product literature; both of which can be accessed from our website www.nufarm.com/uk. Alternatively, ring the Nufarm helpline on 01274 694714, Monday to Friday 9.00 - 17.00

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