➔ **Schedule, using Regalis and Promaline/Gibberellines in case of serious frost**

↪ This Promaline /Gibberellines will only work **DURING** **flowering**, so on **open** flowers.

Jonagold, **Jonagored**, **RedJonaPrince**, **Ligol**, **Mutsu** and **Fuji**	
Stage of development	**Chemical and dose**
If there is predicted serious frost, than best spray the **Regalis** some days **before** that predicted frost. Regalis does need some days to get uptaken. Most important reason is to avoid the forming of ethefon(=Ethrel)	Spray with **Regalis** (Plus)/**Kudos** in a dose of **0,6 - 1,0** kg./ha., depending of the growth and the number of flower-buds. ▶ With trees in second year normally **NO** Regalis before flowering ▶ With trees in the 3rd and the 4th year adapt the dose to tree-size.)
Spray as soon as possible after the frost with **Promaline or GA4/7**. Temperatures, in **this** case, are much less important. **For GA4/7**, in **this** case, even 8 ° C **For Promaline**, in **this** case 10 -12° C is enough, but if you have no Ga4/7 than use even Promaline even with lower temperatures. If there will be 2-3 nights of frost, spray the Promaline than after the second or third frost-night.	Spray **Promaline** in a dose of **0,6 - 0,75** ltr./ha. depending of tree-size and number of flowerbuds. If you **only** **have** **GA4/7** spray **1,2 - 1,5** ltr. of GA4/7 (10 gr./L) With young trees (2de and 3th year) adapt the dose to tree-size **DO NOT** overdo this dose **!!!** Otherwise, next year you will have **NO** flowerbuds in the next year

➔ **Schedule, using Regalis and Promaline/Gibberellines in case of serious frost**

➥ This Promaline/Gibberellines will only work **DURING** flowering, so on **open** flowers

All other APPLE varieties; Small sized apple varieties	
Stage of development	**Chemical and dose**
If there is predicted serious frost, than best spray the **Regalis** some days before that predicted frost. Regalis does need some days to get uptaken.	Spray with **Regalis** (Plus)/**Kudos** in a dose of **0,6 - 1,0** kg./ha., depending of the growth and the number of flowerbuds. ▶ With trees in second year normally **NO** Regalis before flowering ▶ With trees in the 3rd and the 4th year adapt the dose to tree-size (For spraying-conditions for Regalis, see earlier page)
Spray as soon as possible after the frost with **Promalin or GA4/7**. Temperatures, in **this** case, are much less important. **For GA4/7**, in **this** case, even 8 ° C **For Promaline**, in **this** case 10 -12° C is enough, but if you have no Ga4/7 than use even Promaline even with lower temperatures. If there will be 2-3 nights of frost, spray the Promaline than after the second or third frost-night.	Spray **Promaline** in a dose of **0,4 - 0,5** ltr./ha. depending of tree-size and number of flowerbuds. If you **only have GA4/7** spray **0,8 -1,0** ltr. of GA4/7 (10 gr./L) depending of tree-size and number of flowerbuds. With young trees (2de and 3th year) adapt the dose to tree-size. **DO NOT** overdo this dose **!!!** Otherwise, next year you will have **NO** flowerbuds in the next year!

➔ **Things concerning Promaline**

Promaline does contain; 19 gr./L GA4/7 **plus** 19 gr./L **B**enzyl-**A**denine (= BA)

Most brands **GA4/7** does only contain; 10 grams of GA4/7/L

- **DO NOT** mix Promaline yourself. It will work much less than the already mixed product.
- Use as **fresh** product as possible. After 2 years the effect will get less and less good.
  Most fresh Promaline and GA4/7, that you can buy now, is produced in 2023.
  That is the best.
  Also Promaline and GA4/7, produced in 2022 and stored well, will be still good.
  Promaline and GA4/7, produced in 2022, if you do not use it this year, you still can use it in 2024, **IF** stored frost-free and on a cool and dark place.

➔ Brands of Gibberelines

There are an **enormous amounts** of brands of Gibberellines.
There will be even much more than mentioned here under.
Most important is to look at the ingredients **and the year of production**

In this Newsletter the advises are given:

- When GA4/7 is named it is GA4/7 of 1% active (= 10 gram per liter)
- When Promaline is named it is Promaline of 1,9% **plus** 1,9 %
  (19 **plus** 19 gram per Liter) a4 + a7 **plus** BA (Benzyladenine)

Brand	kind of gibberelline	% active ingredient
GIBB Plus	a4 + a7 flowable	1 % (= 10 gram per liter)
Novagib	a4 + a7 flowable	1 % (= 10 gram per liter)
Regulex	a4 + a7 flowable	1 % (= 10 gram per liter)
Stefagib	a4 + a7 flowable	1 % (= 10 gram per liter)
Provide 10 SG	a4 + a7 **granules** ➥ can be stored 3-5 years	**Remind**: **10** % active (**!**)
Regulex 10 SG	a4 + a7 **granules** ➥ can be stored 3-5 years	**Remind**: **10** % active (**!**)
Gibbalin	a4 + a7 **plus** BA (Benzyladenine)	1,9% **plus** 1,9 % (19 **plus** 19 gram per Liter)
Perlan	a4 + a7 **plus** BA (Benzyladenine)	1,9% **plus** 1,9 % (19 **plus** 19 gram per Liter)
Promalin	a4 + a7 **plus** BA (Benzyladenine)	1,9% **plus** 1,9 % (19 **plus** 19 gram per Liter)
Prorex	a4 + a7 **plus** BA (Benzyladenine)	1,9% **plus** 1,9 % (19 **plus** 19 gram per Liter)

Very important is that the gibberelines are as fresh as possible.

This newsletter is made according the newest insights in several countries
Allowance of several chemicals are different **per country**.
The grower is always responsible following/ work according, the law in their own country
Fruit **A**dvies **Z**uid-**L**imburg can never hold responsible for the given advice in this Newsletter.

The End

FRUIT ADVIES
ZUID LIMBURG