



Infinito: A unique fungicide with multiple activity for tuber blight control - EU experiences 2005-2008

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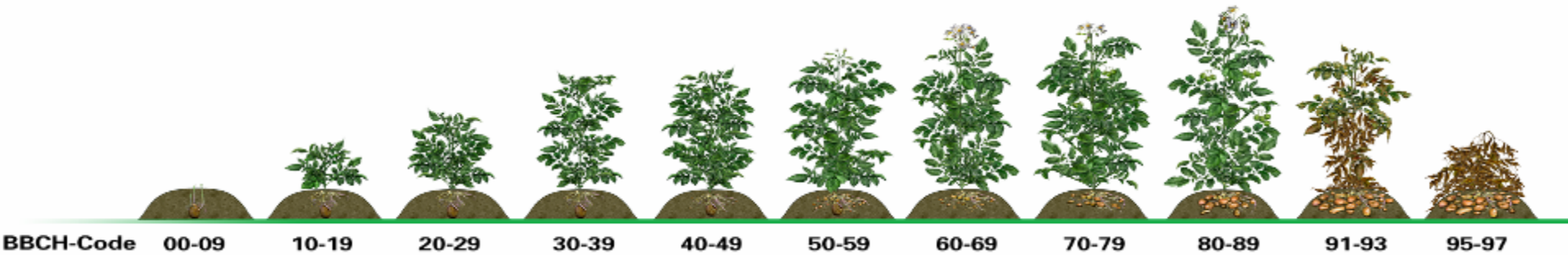


Tuber blight

- Yield losses at harvest and during storage
- Tuber protection starts even before the plants initiate tubers in mid-season
- Sporangia and zoospores are washed down from the leaves and from infected stems by rainfall and irrigation
- Sporangia washed down to the soil can remain viable for several months

Tuber Blight Infection

Tuber susceptibility



Emergence

Active growth

Stable canopy

Bulking

Sporangia viability
15 - 77 days in soil

Sporangia /zoospores

90 – 150 days depending on variety

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Always read the label. Use pesticides safely.

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Infinito Features

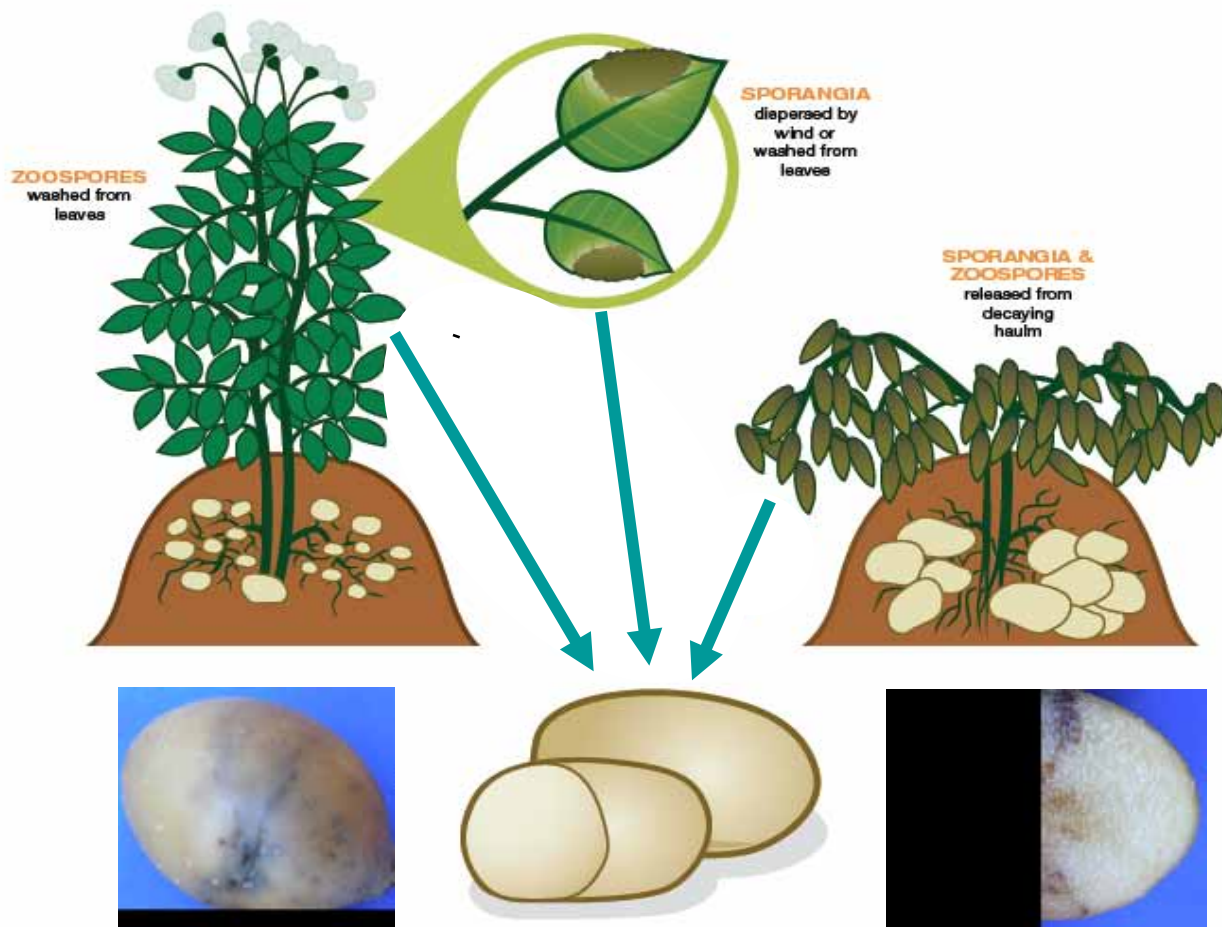
- A new mode of action based on fluopicolide
- Excellent regulatory profile
- Reliable and consistent high level of potato late blight control on stems and leaves
- Long-lasting activity
- Protection against tuber blight
- Yield enhancing
- Registered for use in all crops – processing, table potatoes and seed

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Tuber Infection



Spore quantity

Spore mobility

Spore viability

How does Infinito work

Spore quantity

- Long-lasting and excellent canopy protection
- Protection of new shoots and stems by translaminar and systemic activity
- Strong anti-sporulant activity

Spore mobility

- Fast sporicidal activity
- Any zoospores released during rainfall or irrigation are killed by Infinito on leaf surface

Spore viability

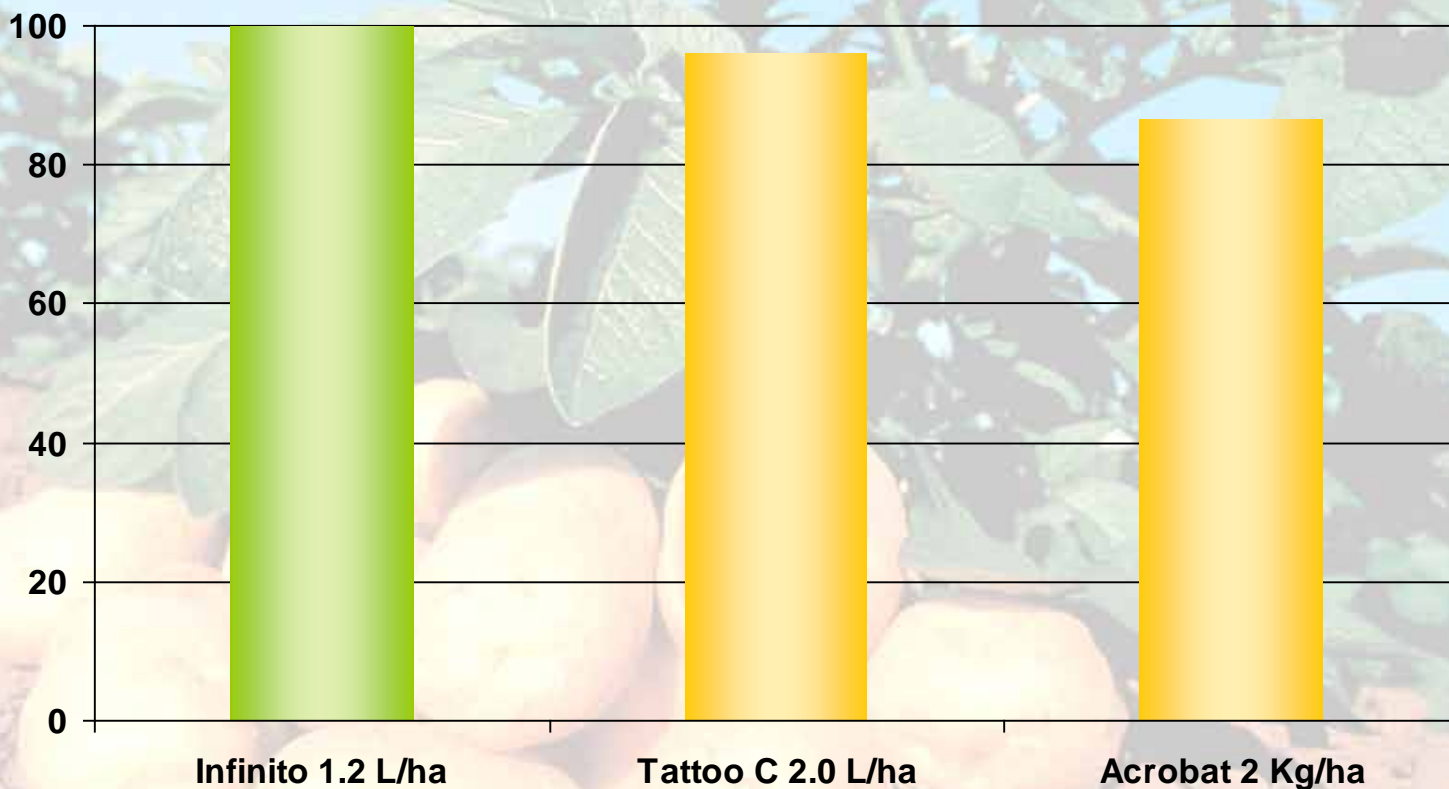
- Spore viability reduced through preventing the release of zoospores from sporangia leading to strongly reduced germination

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Anti-sporulant activity

% Inhibition of sporangia formation



7 days after inoculation - 166.000 sporangia / ml in untreated

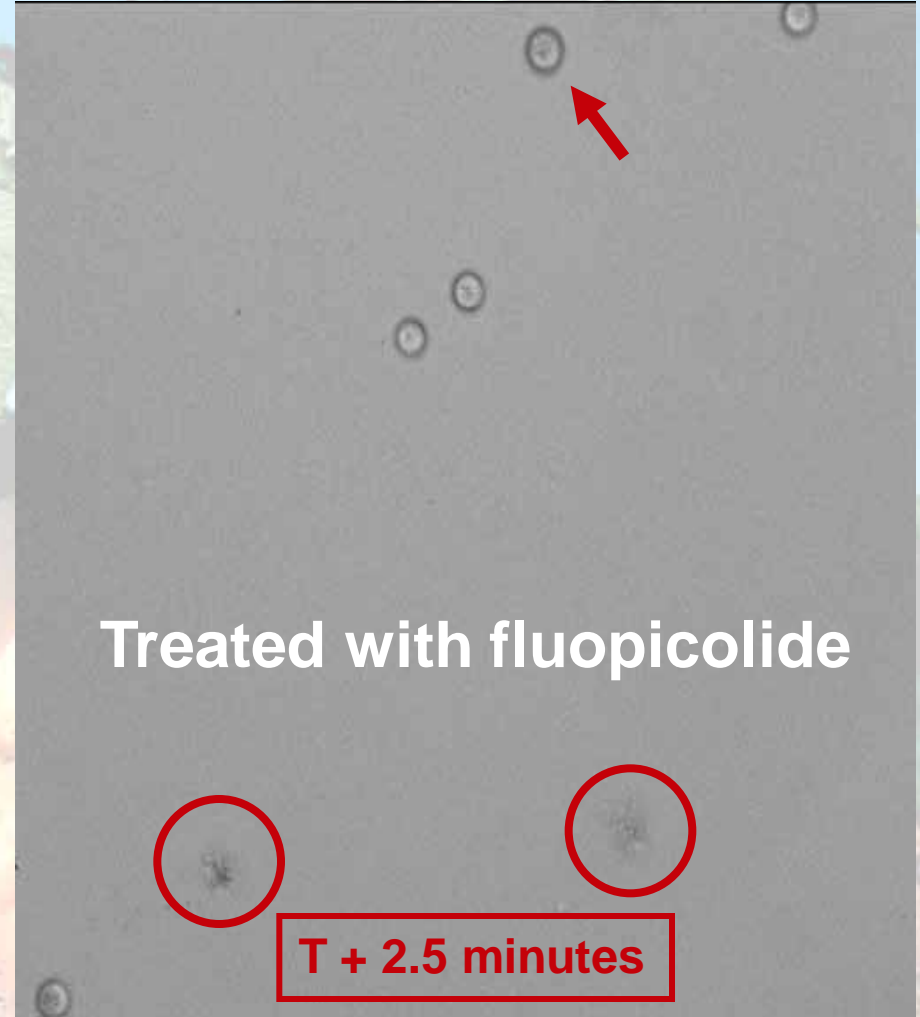
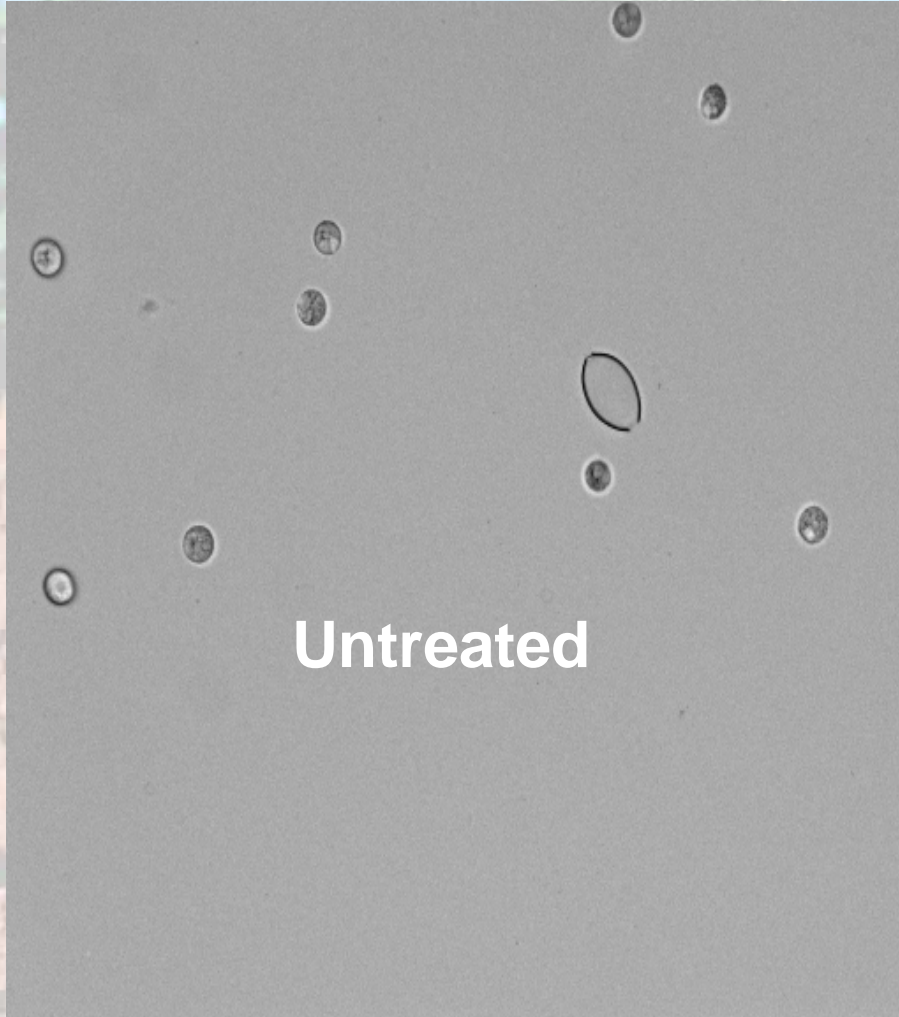
Source: Bayer CropScience, Fungicide Research, Lyon

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Fast-action of fluopicolide on zoospores



Effect of Infinito

Spore quantity

Spore mobility

Spore viability

Potential infection sources reaching the soil are eliminated

Infinito – Unique multiple action against tuber blight

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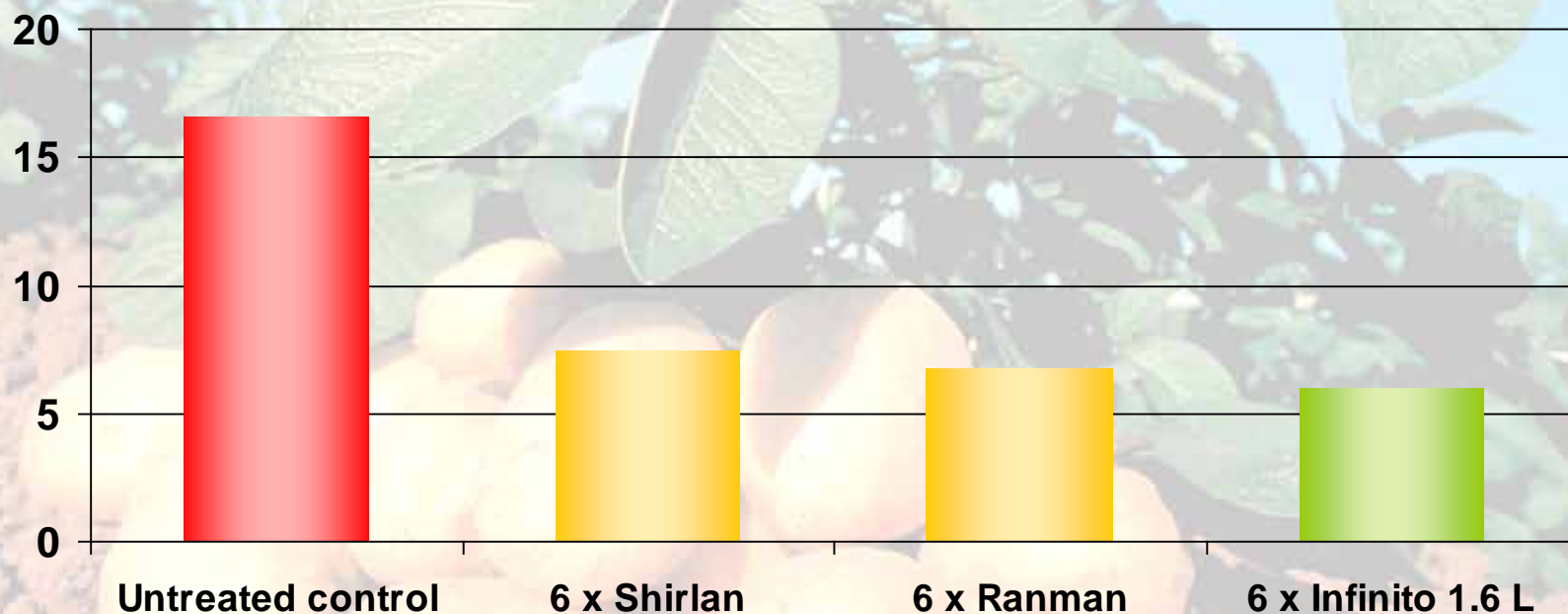
Field trials :- Treatments and dose rates

All treatments used as detailed below unless stated

Infinito	fluopicolide+propamocarb	1.2 - 1.6 L/ha
Ranman	cyazofamid +adjuvant	0.2 + 0.15 L/ha
Shirlan	fluazinam	0.4 L/ha
Fubol Gold / Ridomil Gold	metalaxyl-M+mancozeb	1.0 or 2 Kg/ha
Revus	mandipropamid	0.6 L/ha
Curzate M WG	cymoxanil + mancozeb	2.0 Kg
Electis / Unikat Pro	zoxamide+mancozeb	1.8 Kg/ha
Dithane	mancozeb	2.25 Kg/ha

Tuber Blight Control – Netherlands 2005

% tuber infection



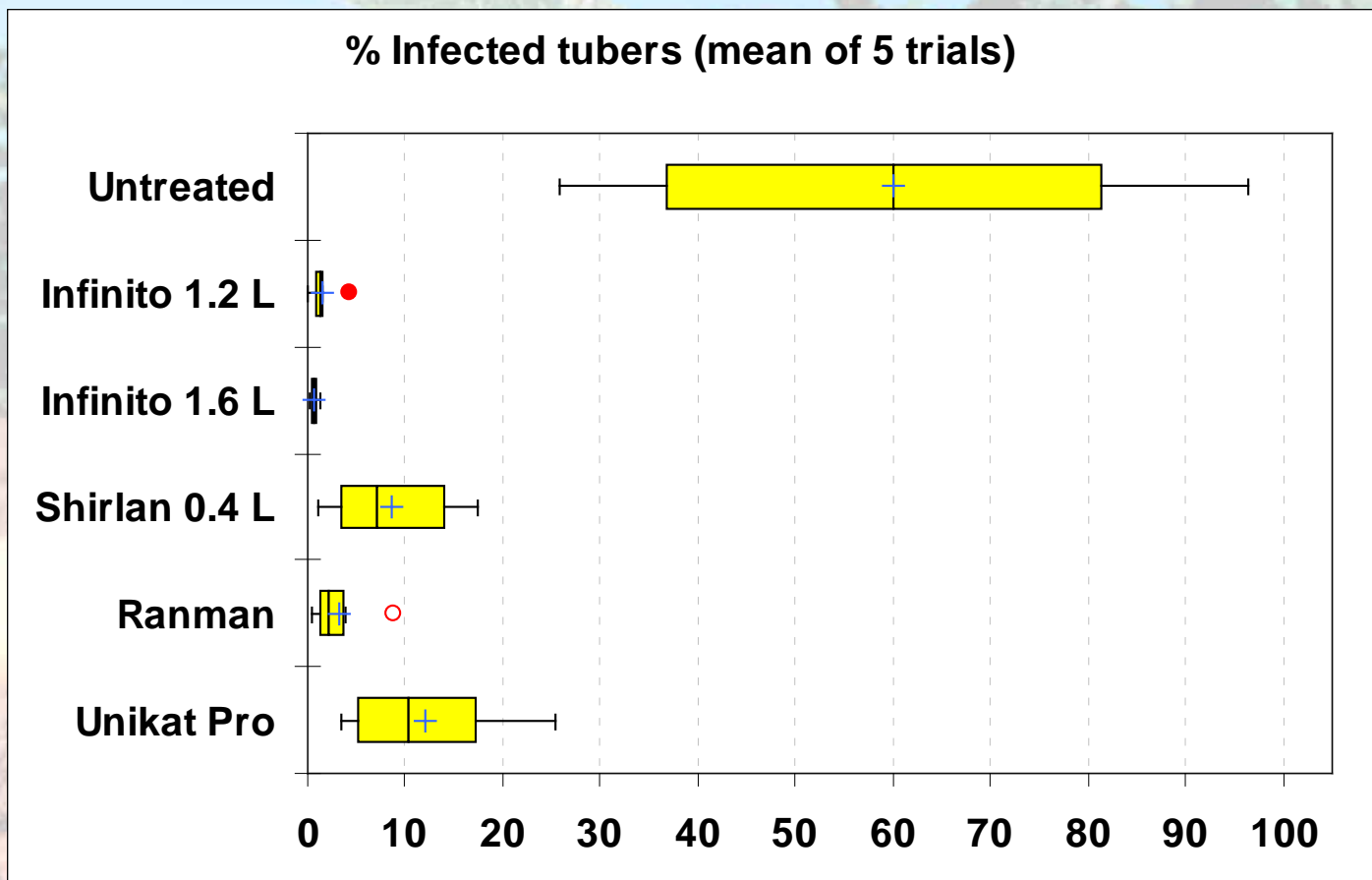
Source : Applied Plant Research, Lelystad, The Netherlands, 2005

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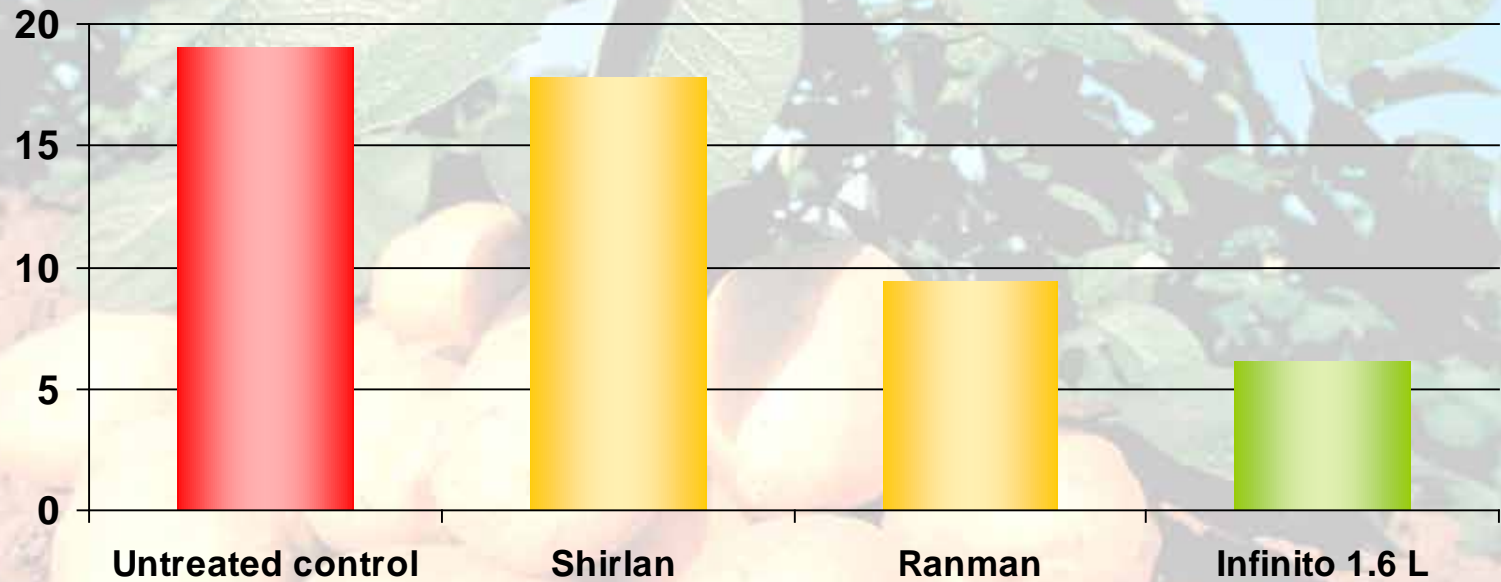
Tuber Blight Control, Netherlands 2005-2007



Source: Bayer CropScience, The Netherlands

Tuber Blight Control, France 2006

% tuber infection



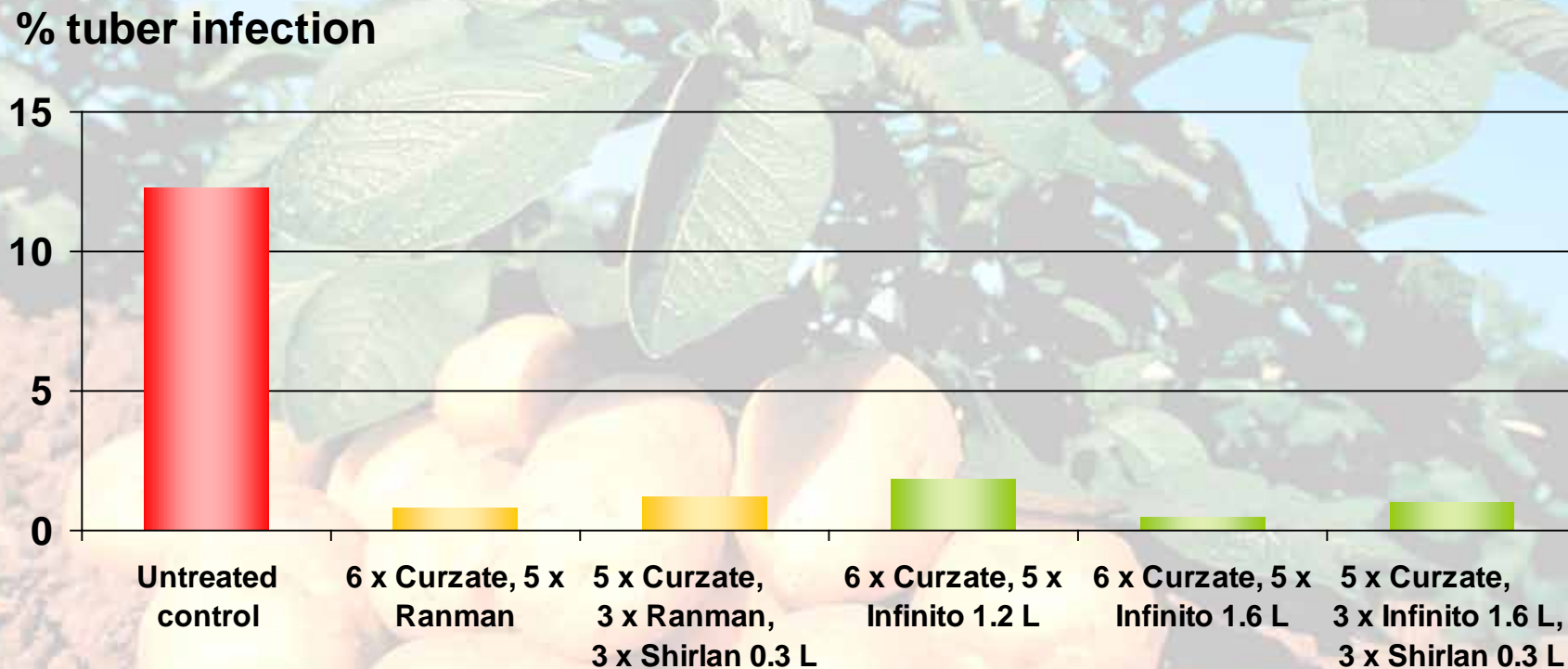
Source: mean of 2 trials, Bayer CropScience France

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Tuber Blight Control – UK 2005



Source : SAC, Auchincruive, Scotland 2005

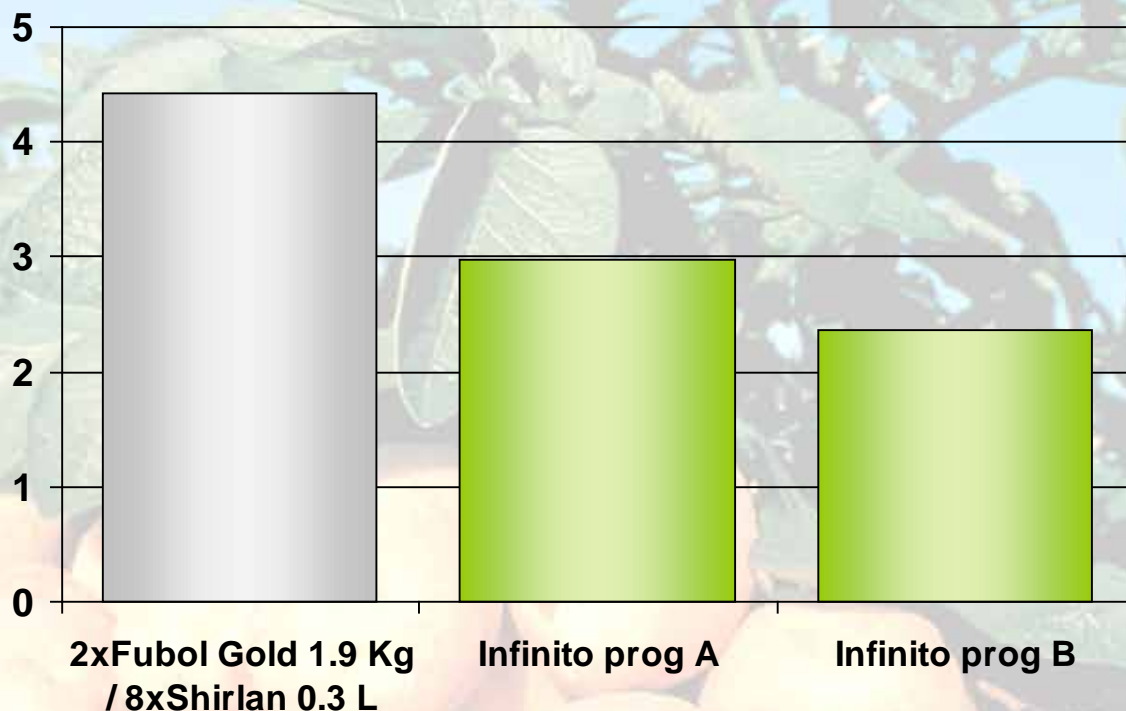
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Tuber Blight Control, Northern Ireland 2007

% infected tubers



Infinito programme A = 2 x Fubol Gold / Shirlan alternating with Infinito 1.6 L/ha
Infinito programme B = 2 x Fubol Gold / 1x Shirlan, 4 x Infinito 1.6 L/ha, 3 x Shirlan

Agri-Food & Biosciences Institute, Belfast, N Ireland

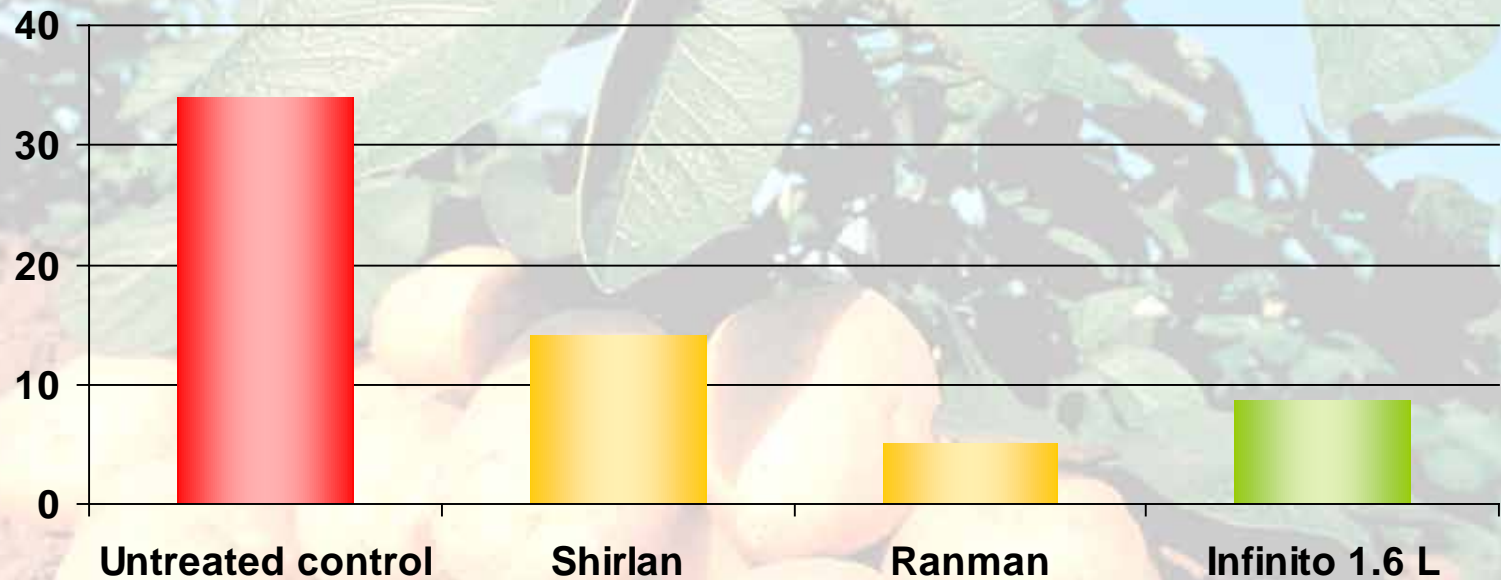
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Tuber Blight Control - Germany 2006

% tuber infection



Source: mean of 2 trials Amtlicher Dienst NRW, Brentler, Germany

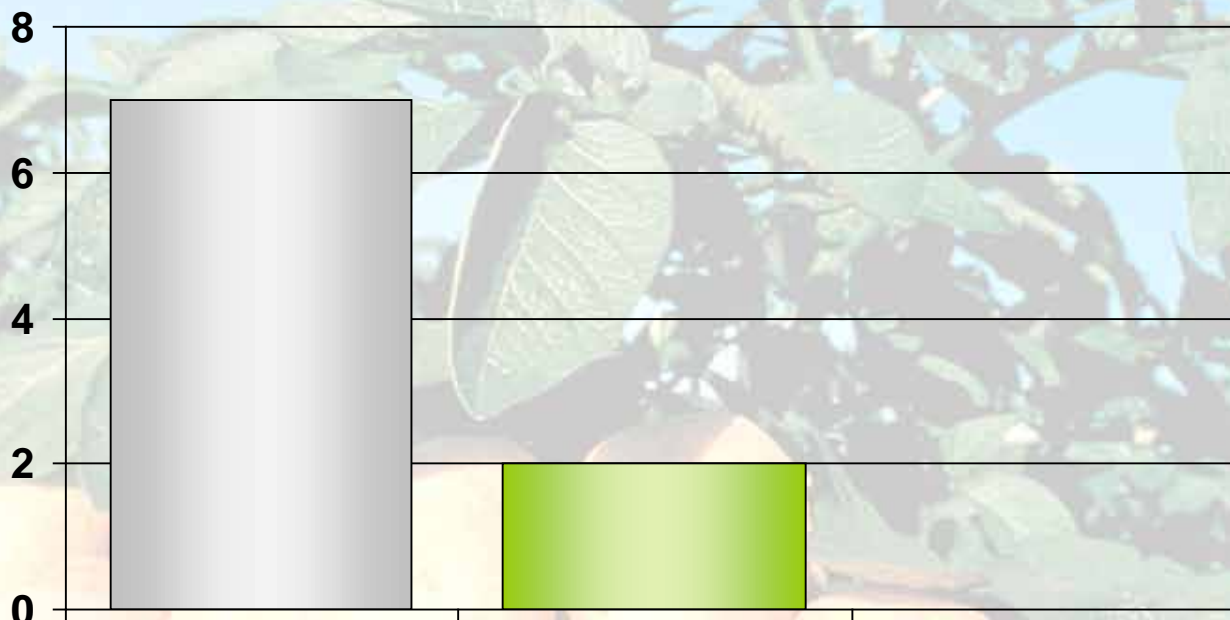
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Tuber Blight Control, Germany 2008

% infected tubers



Ridomil Gold 2 Kg /
9x Curzate

Ridomil Gold 2 Kg /
7xCurzate/ 2 x
Shirlan 0.4L

Infito prog

Infito prog Ridomil Gold/3 x Curzate 4 x Infito 1.5 L / 2 xShirlan 0.4 L

Source Bayer CropScience trial, Germany

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Conclusions

Ø Unique multiple action of Infinito gives all-round protection

- Long-lasting protectant activity on foliage
- Protection of new growth
- Translaminar activity
- Anti-sporulant activity
- Sporicidal activity
- Reduction in spore viability and germination

Ø Multiple action is the basis for robust control of tuber blight

Ø High rating (+++) given at Euroblight, Bologna is confirmed

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Acknowledgments

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