



Apples & Pears



**INCREASE YOUR CROP
YIELD EFFECTIVELY**



The apple and pear tree

One of the oldest cultivated trees in diverse climate conditions, ranging from the cold Canadian climate to the tropical climate of Africa.

They are very similar in floral structure, cultivation, propagation, and pollination.

Apple and pear trees aren't just for people with acres upon acres of land.



Most important factors for growing apple and pears trees and achieving good yields in the long term:

- 💧 Climate
- 💧 Planting distances
- 💧 Pollination
- 💧 Fertilization
- 💧 Irrigation
- 💧 Pruning and thinning

Even in a small space, you can plant an orchard and yield a successful crop.



Apples

The best quality is accomplished where days are warm, nights cold, and maximum radiation. Apples are resistant to frost down to -40°C . Blossoms and fruit-set will suffer damage at -2.2°C – -3.3°C . Apples blossom late comparing to other deciduous crops, so there is less danger of frost.



Pears

Pear can be grown in a wide range of climatic conditions, it can tolerate low temperature -26°C when dormant and high 45°C during the growing period. Spring frost is harmful to the pear crop, and temperatures at -3.30C or below can destroy the open blossom.

Optimal soil type:

Medium, well-drained soils with a pH is 6-7 are preferable.



Drip irrigation for Apples and Pears

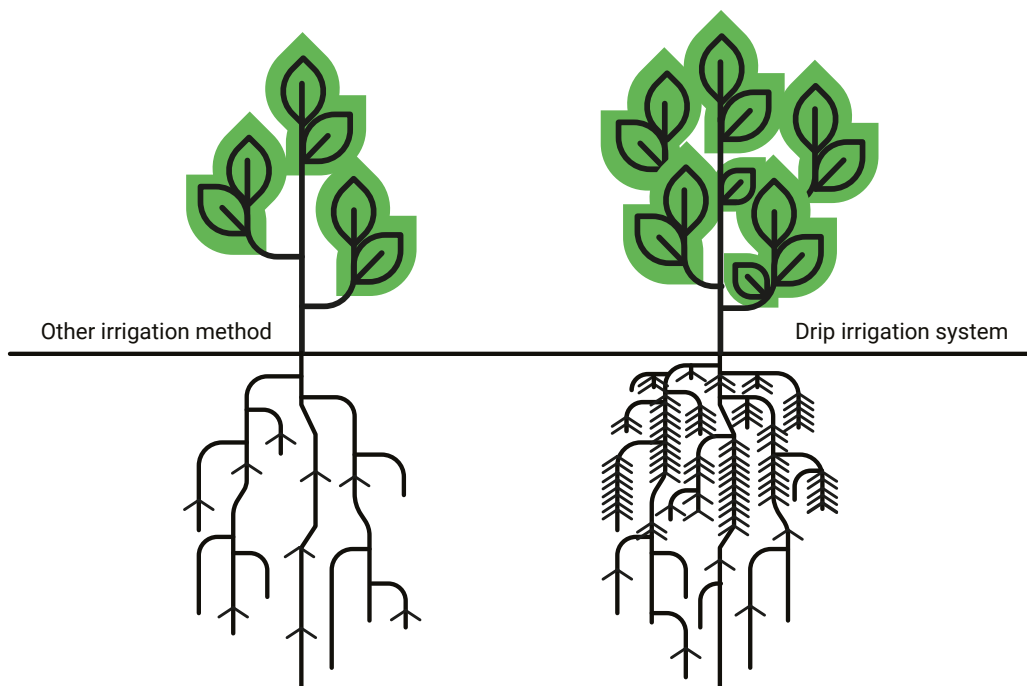
Tool for supplying the plant requirements at the optimal time and place. It holds many benefits:

- ◆ Concentrates the roots in a defined soil volume, saving the plant's energy
- ◆ Improves the water and nutrient uptake efficiency
- ◆ Develops optimal moisture and aeration conditions.
- ◆ Increases irrigation effectiveness on uneven ground
- ◆ Reduces leaching of water and nutrients below the root zone



Drip irrigation technical recommendations

- ◆ **Distance between drippers**
from 0.5m to 0.6m, one lateral per row
- ◆ **Discharge rate**
normally 1.35 - 2.35 l/h, according to soil type
- ◆ **Irrigation frequency**
every 1-3 days, according to soil type





Critical stages for water stress in the soil in apple and pear orchards

It is important to understand the growth stages for apples and pears that are most susceptible to water availability so that irrigation can be tailored and optimized throughout the season.

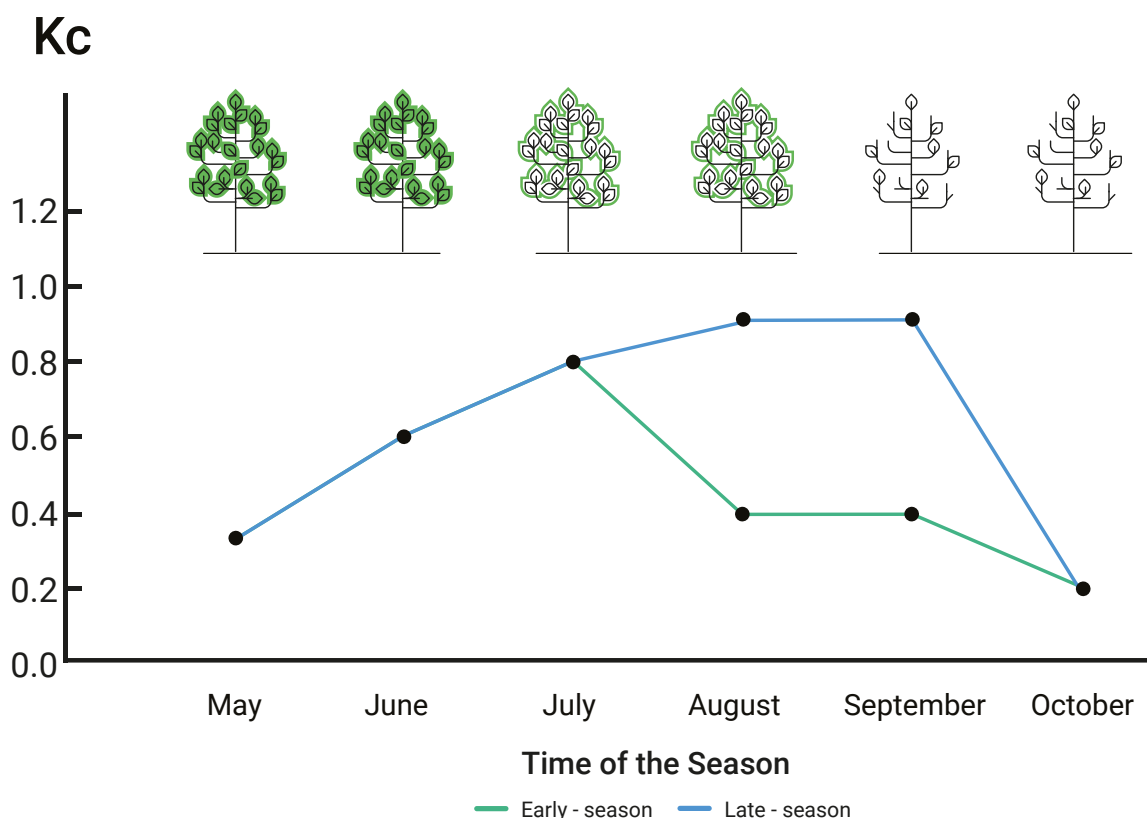
Water stress risks during the critical stages of tree growth:

- 💧 Leaves dropping off
- 💧 Reduction in yields
- 💧 Low income

Critical stages are mainly during the blossoming, and fruit-set stages, fruit development stages, and also towards the end of the growing season.

Kc values for Apple and Pear trees

Apple Variety	May	June	July	August	September	October
Early - season	0.35	0.6	0.8	0.4	0.4	0.2
Late - season	0.35	0.6	0.8	0.9	0.9	0.2



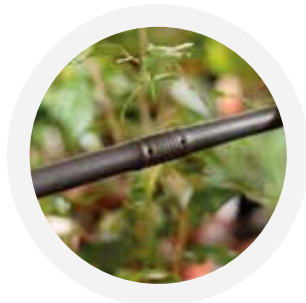


Products that will meet your needs, whatever the size of your orchard



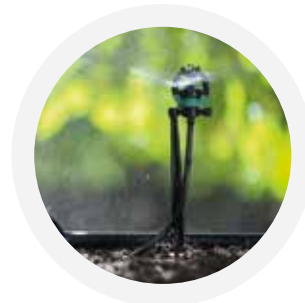
MAIN LINE

- PE pipes
- High-pressure fittings
- High-pressure valves



DRIPLINE AND ACCESSORIES

- PoliDrip PC driplines
- PoliDrip PCND driplines
- PoliDrip light PC driplines
- Low-pressure fittings and valves
- Tools and accessories



MICRO SPRINKLER SYSTEM

- Irrigation, cooling, and frost protection for orchards
- Delivers a uniform spray pattern at a low angle for under tree applications
- Built-in anti-insect device



FILTRATION

- Hydrocyclone
- Disc and screen filters (manual, semi-automatic, automatic)
- Gravel media filters (manual, automatic)



FERTIGATION

Fertigation systems appropriately dose the quantity of fertilizer necessary for the crop. No waste of expensive chemicals, labor, and machinery. No uncontrolled pollution, unnecessary soil compression, and crop damage.



AUTOMATION

We have a wide range of controllers for irrigation and fertilization control. They are configurable and with multiple possibilities of use, communication, and extension. Equipped for irrigation control, fertilization, pumping, and filter cleaning, with fault detection and detailed chronological recording of events and historical accumulation.

NOTE:

This brochure is for information purposes only, and results may vary depending on different factors. Please consult with an irrigation specialist and technical details for proper use of Poliext products.

Specifications and designs of products may change without notice. Make sure to verify the information before making any decision.



Get your orchard a good start



Tell us about your project



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