Version 2021

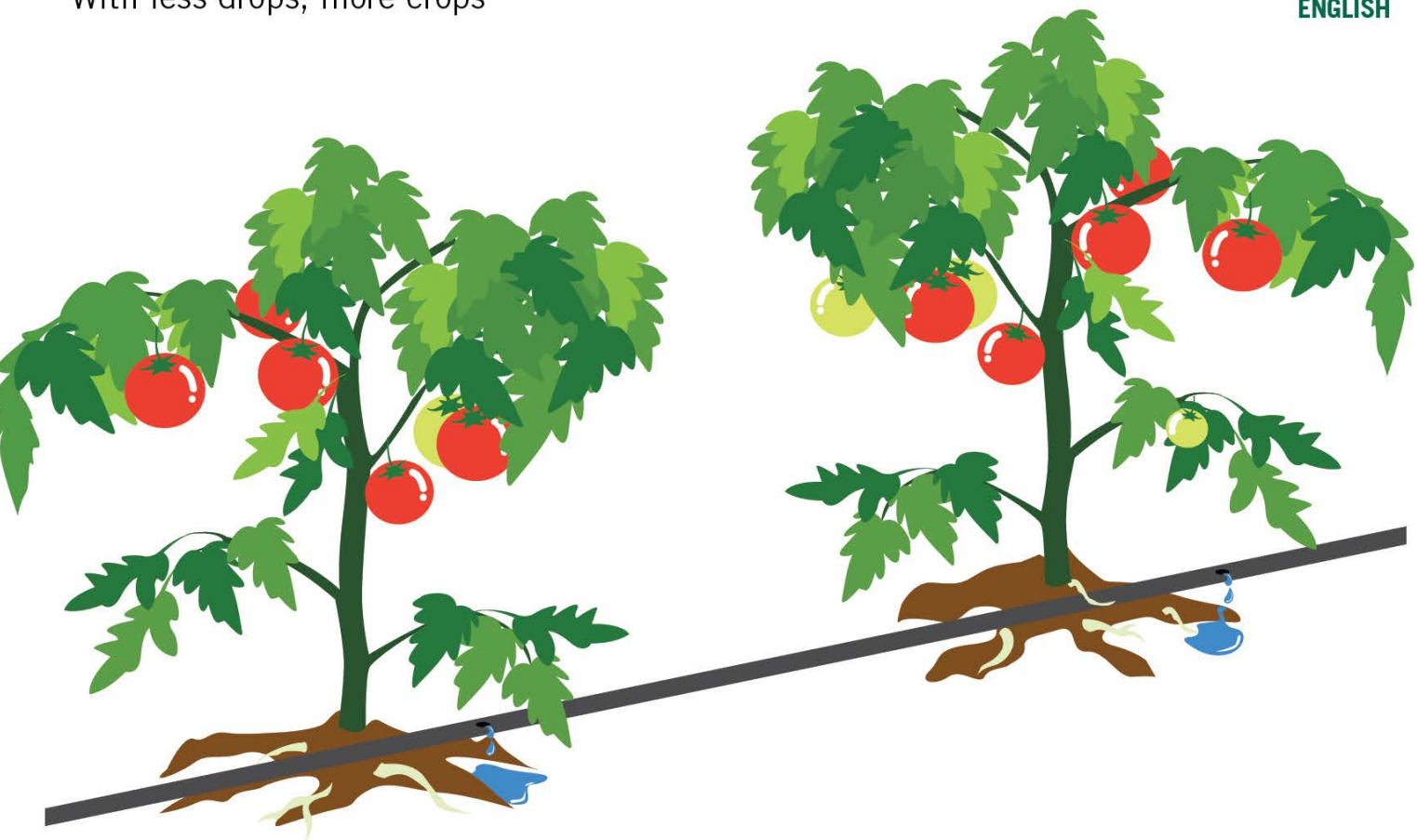
EAST-WEST SEED FOUNDATION | KNOWLEDGE TRANSFER

DRIP IRRIGATION
Technical Guide

ENGLISH

• Why Drip Irrigation?

Drip Irrigation = slow application of water onto the soil from small plastic pipes with emitters.
"With less drops, more crops"



Benefits:

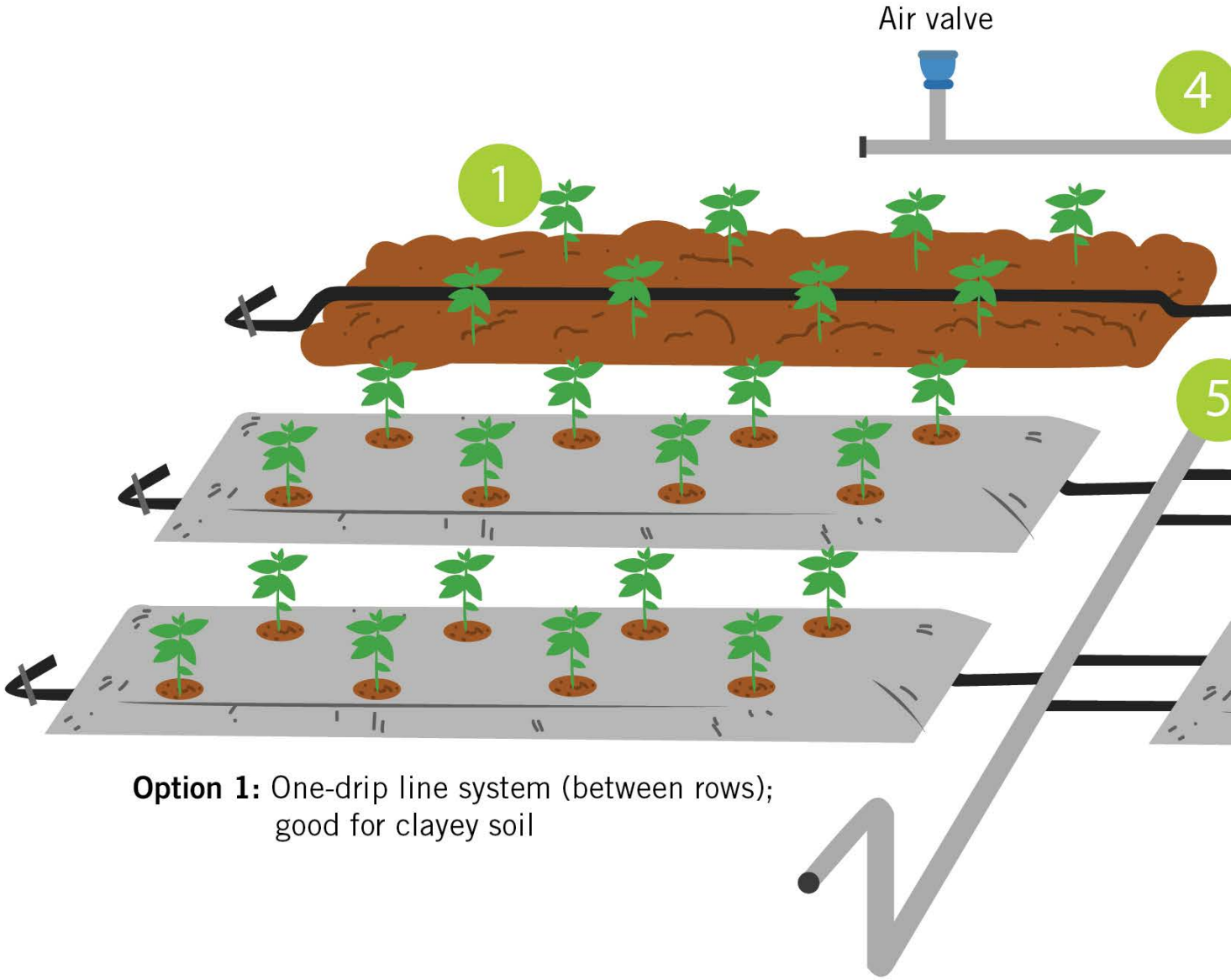
» Efficient water use (90%)
» Reduces disease pressures
» Reduces soil erosion
» Reduces fertilizer leaching
» Reduces labor cost

Challenges:

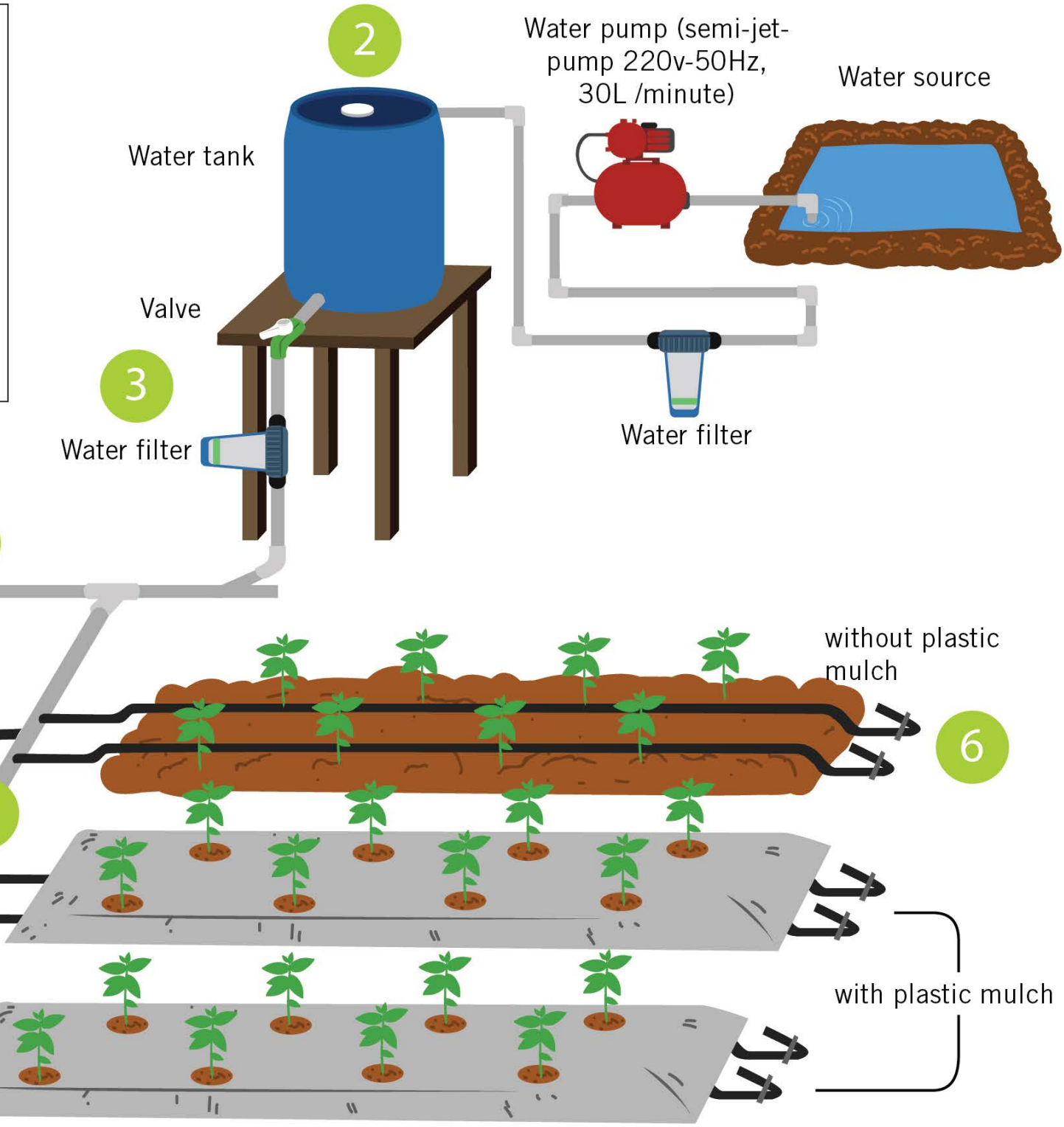
» High initial investment cost
» Requires maintenance
» Requires high quality of water
» Requires skills

• Lay-out and installation (small scale gravity drip irrigation)

1. Prepare raised beds (15-20 m length).
2. Prepare head structure (1-2 m high) for water tank (1000 L tank for 200-300 m2).
3. Fix outlet and install the water filter.
4. Connect the mainline.
5. Lay the drip lines.
6. Lock the drip lines at the end.



Option 1: One-drip line system (between rows); good for clayey soil



Option 2: Two-drip line system (in lined with rows); good for sandy soil

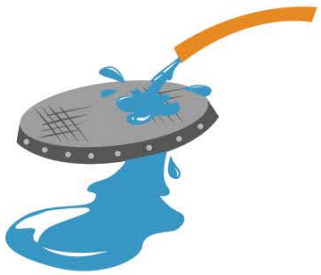
Best Tip: Application

» Heavy soil (Clayey): Good water holding capacity; longer time and less frequency of irrigation

» Light soil (Sandy): Poor water holding capacity; shorter time and more frequency of irrigation; drip lines closer to plant row.

• Maintenance

Do's (at least once a week):

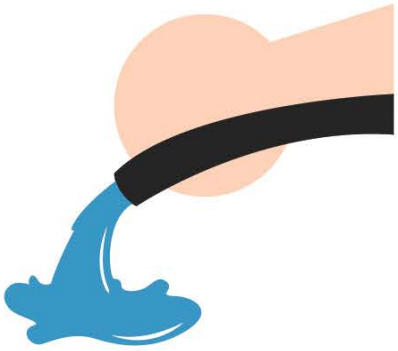


Clean water filters

Check dripper flow

Do's (at least once a month):

Pressurized drip system: Check pressure at the end of the drip line (8-15 PSI)



Flush the drip lines

Don'ts:

If unfamiliar, do not install or fix alone. Ask for advice.

TIPS:

Cover the tank for protection and durability

Storage: If not in use, put in shaded and dry place

Disposal: Collect and recycle, if possible. Do not burn, bury or throw anywhere

http://growhow.eastwestseed.com

Agrochemical recommendations have been developed in cooperation with Wageningen University & Research

WAGENINGEN UNIVERSITY & RESEARCH