

The Methodology:

- Learn :“literature.”
- Field visit. Meet the “factor” that create the activity:
 - *Leadre rgowers (Big/Small)
 - *Industry (Proccessing).
 - *Scientist, Consultants.
- Consult NETAIM Solutions makers: Marketing +Engeneering.
- Set the Agro-marketing & Finance solution.
- Create final solution for markwtin/selling.

Hazelnuts, with shell | 2006

Production Quantity	Yield per hectar (kg/Ha)	Area Harvested	
661000.00	1652.50	400000.00	Turkey

Production Quantity	Yield per hectar (kg/Ha)	Area Harvested	
142109.00	2082.70	68233.00	Italy

Production Quantity	Yield per hectar (kg/Ha)	Area Harvested	
6083.00	2059.94	2953.00	France

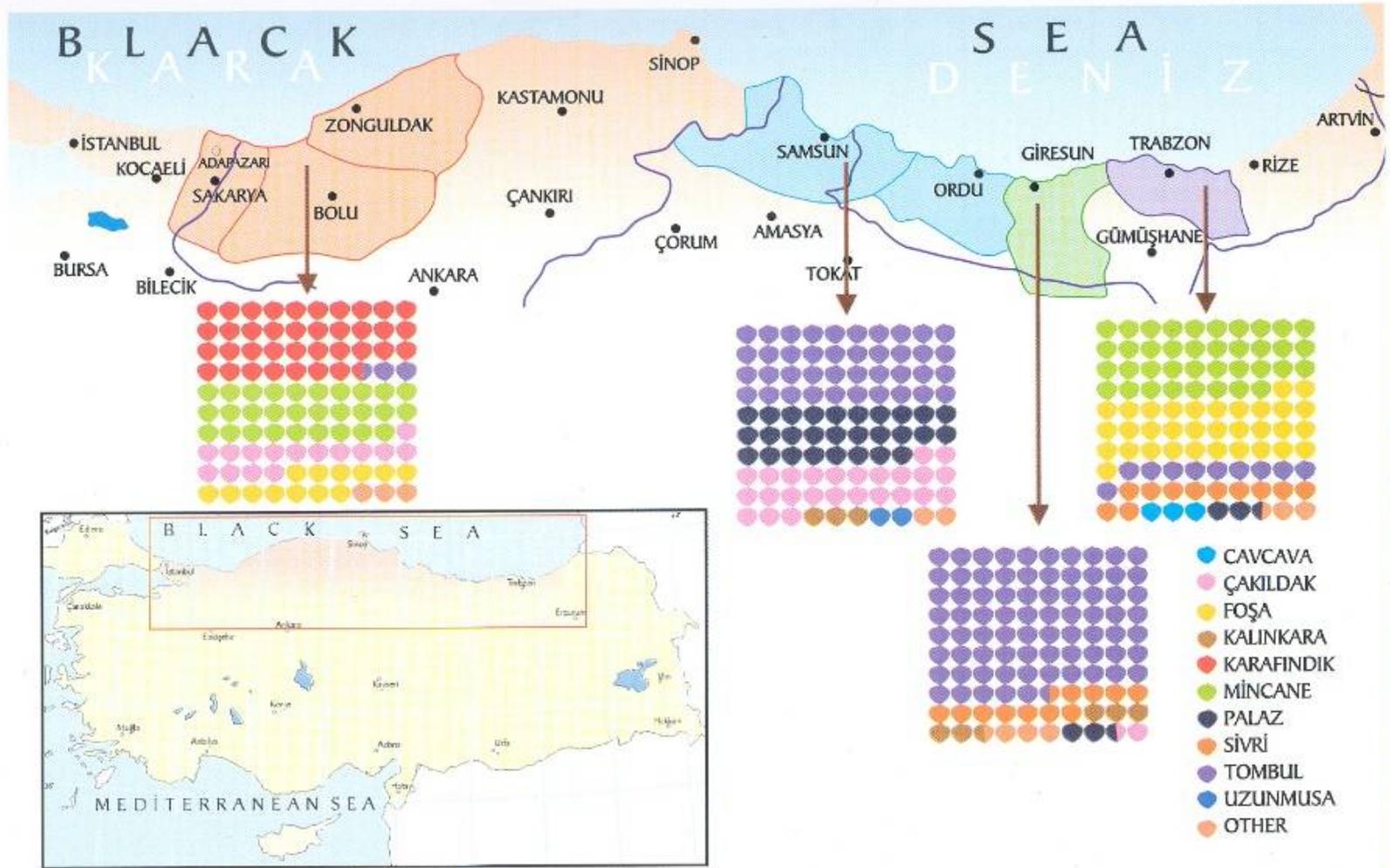


Figure 7.2. Distribution of hazelnut cultivars according to their growing counties.

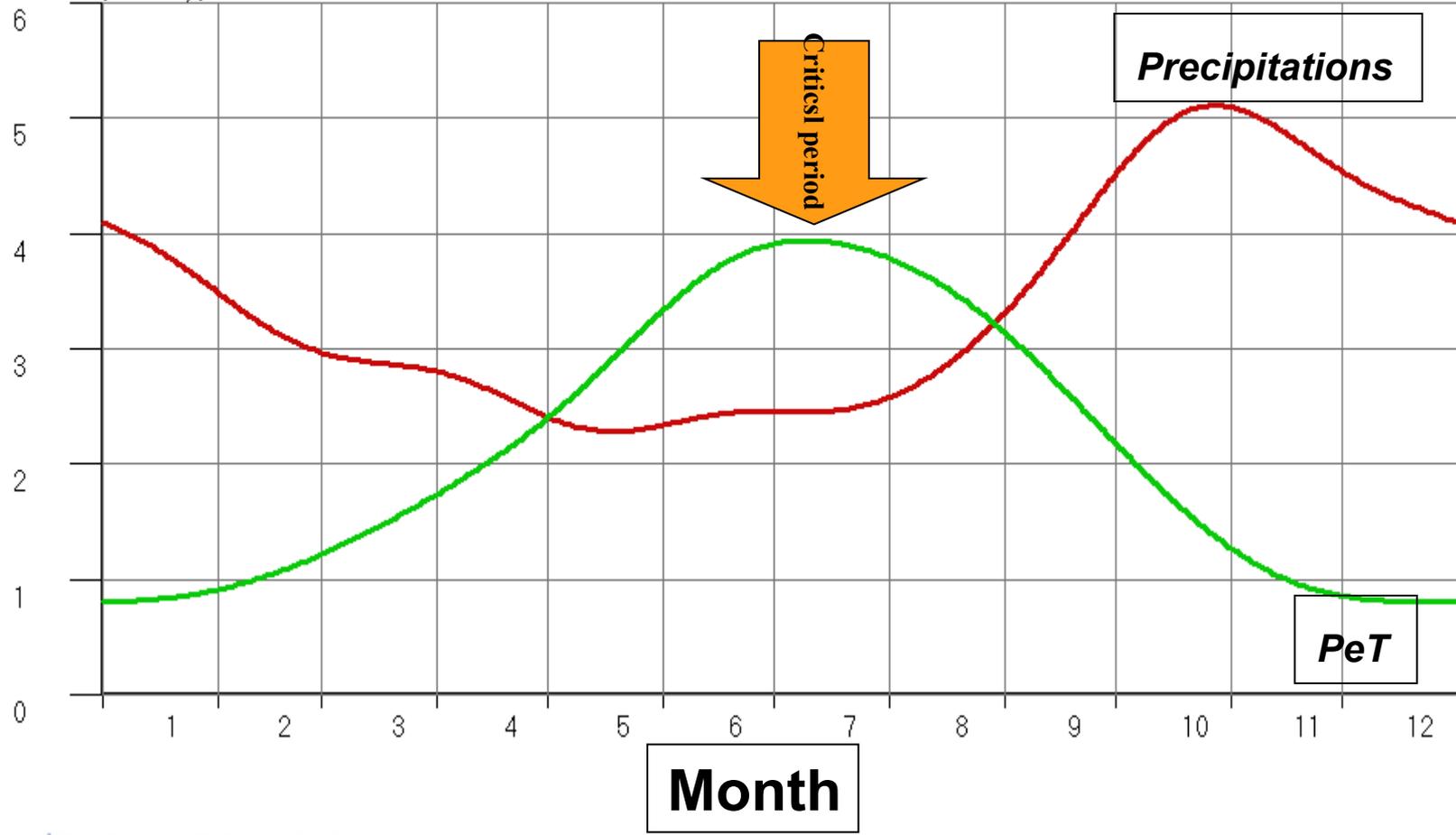


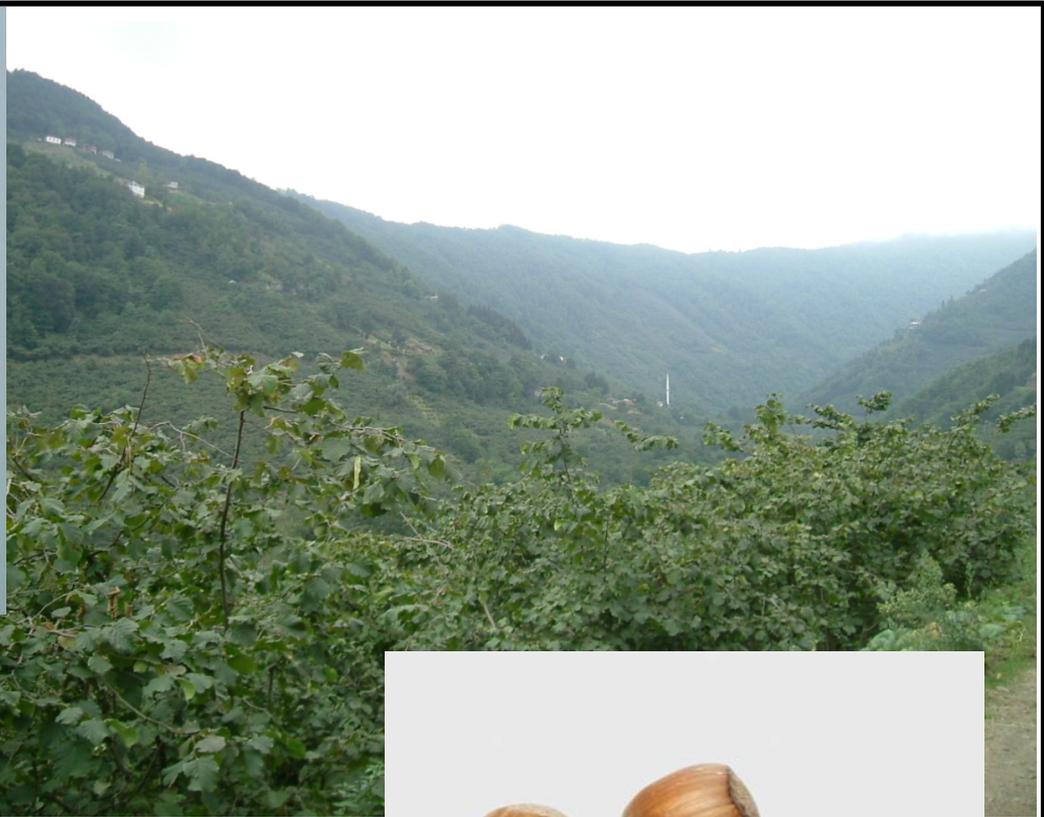




Giresun Water balance

Mm/day





Why drip must succeed?

Present situation:

- Dry periods.
- Steep slopes.
- Heavy rains leach nutrients.



Drip situation:

- **Controlled wetted soil horizon.**
- **Controlled nutrition at the roots level.**



Agro marketing targets

- Market volume (us \$):
- 10% of 450,000 Ha=450,000 Dekar.
- Sale price per Dekar=150 us\$.
- Total volume under those assumptions: 67.5 M US \$.
- ***Possible to penetrate this market in the coming 5 years – to be a leader, with 10 M US \$.[=6700 Ha]***

Economical “Thumb” calculation

(Have to be proved) Also checked under NESSS

- Present Yield (Kg/Dekar): 80.
- Present grower income (\$/Dekar): $80 * 3 = 240$.
- Estimated yield under nutrigration (Kg/Dekar)=110.
- Estimated added income for grower (\$/Dekar):
 $(110-80)*3 = 90$.
- ***The customer can pay NETAFIM system in 2 seasons.***

Additional advantages:

- Sustainable CONSTANT yields .
- Crop Quality improvement (Size,Oil).



Netafim technical solution

- **Principles for suggested Drip fertigation system :**
- **Dripper:** Uniram/Dripnet PC.
- **Discharge** (l/h): 2.3 / 3.0.
- **Drippers spacing** (m) : 0.6-0.75
- Drip lines direction in field: Downward (With the slope direction). The drip line lay in the centre of each "bush" of Hazelnut.
- **Water sources:**
 - A; Catch water from running springs (at foot of the hills.)
 - B. Build a small reservoir to collect 350-400 m³ from mountain springs, or saturated soil layer.
 - **Nutrigation device:** Pressure tank.
 - **Filtration:** Semi Automat screen filter (Over filtration, 2").

The Beginning (Action items):

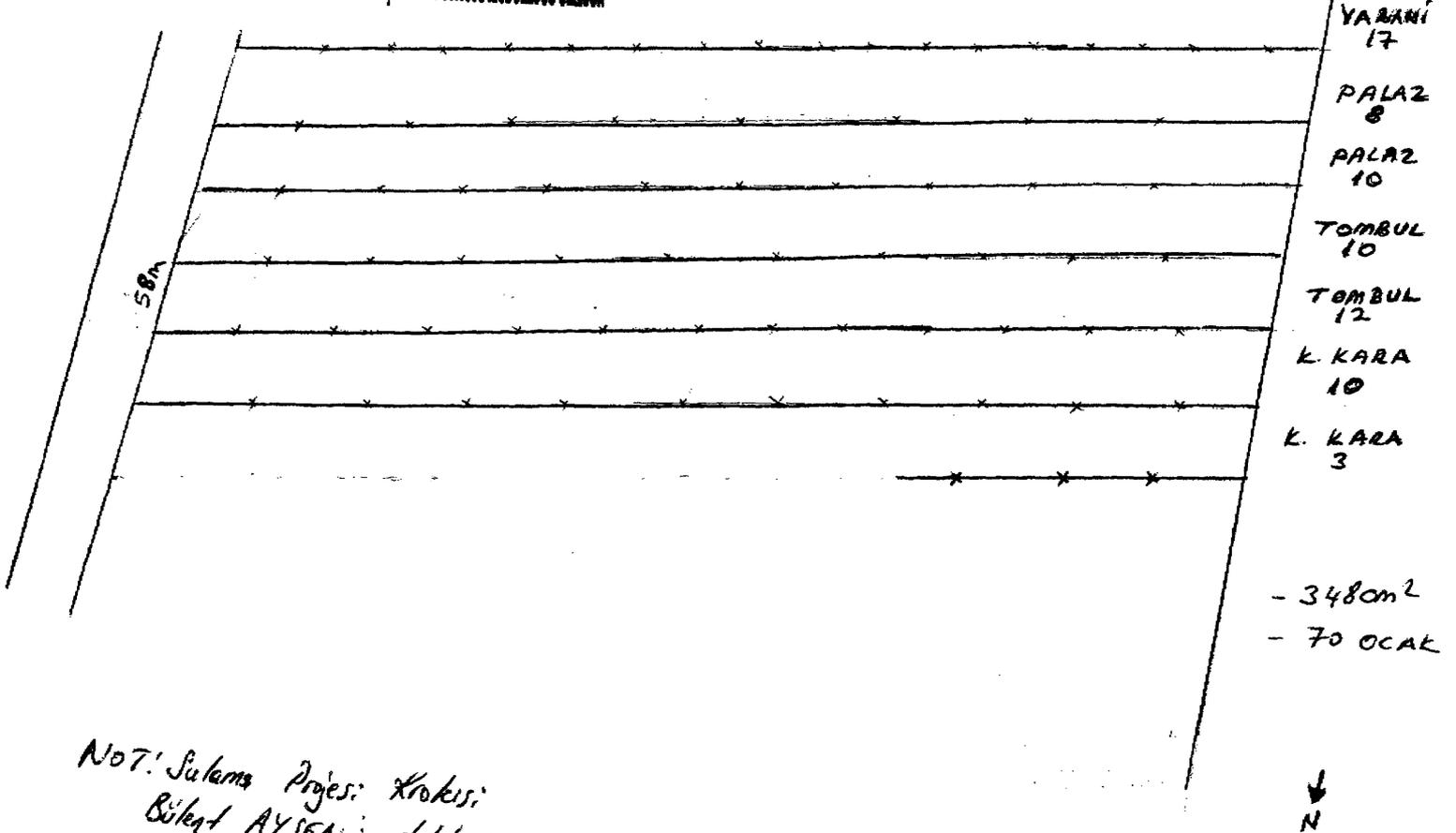
- Experimental plot (1Ha) together with research institute in Giresun . March 2008.
- Commercial plot (5 Ha) in Adapazar. March 2008.
- Targets:
- Demonstate yields improvement . [120-140 Kg/Dek].
- Learn nutrigation recepies.
- Learn quality changes of nuts.
- **Partners :**
- Looking for cooperation with "Ferrero" in other countries. (Italy,Georgia).
- Hazelnut cooperatives + big private growers
- Research institute +Private consultants (Also from other countries).

Depo

T.C.
TARIM ve KÖYİŞLERİ BAKANLIĞI
FİRMAN ARASTIRMA ENSTİTÜSÜ MÜDÜRLÜĞÜ ÖZEL

60 m.

P. 001



08/25/07 14:29

NOT: Sulama Projesi: Krokisi
Bülent AYŞEN'in dikkatine.

Thank you

