Sustainable agriculture in Armenian villages: Fantan, Dzoraghbyur and Hayanist

AWHHE

WECF

Bologna 2006

Goal

To learn the possibilities of passing to organic farming and pesticide reduction in Armenian villages Fantan and Dzoraghbyur of Kotayk Marz and village Hayanist of Ararat Marz in frame of TMF project.

Objectives

1. Raise awareness about organic farming through information and education campaign for farmers in three villages
2. Demonstrate the methods of alternative agriculture in the experimental fields and orchards for increasing the sustainability of agro ecosystems
3. Learn & apply IPM approach replacing pesticide usage by plant liquids

Activities

- Leaflets about methods of organic farming such as bio humus, compost and plant liquids were prepared and delivered among villagers

  300 (farmers) +720 (schoolchildren)
- Guides for farmers were created and distributed
- 7 Seminars and 10 trainings organized for the villagers and farmers

Activities

- Participation in international and national meetings, conferences, workshops and other events
- Presentation of organic farming pilot project results in PAN annual meting in Bologna
- Collaboration with local mass media

- International “Networkshop” WECF and UNSER LAND 19. to 23. January 2006, Munich

- Organic Agriculture Development Perspectives and Opportunities in Armenia 26 January 2006

Results

- Seminars and trainings organized for the villagers and farmers

Field days during the curing in Fantan

- Field days during the curing in Dzoraghbyur

Activities

- Experimental fields and orchards for organic farming were chosen
- Soil samples from chosen fields and orchards analysis was carried out
- Schemes of crop rotation were made
- Certified seeds from the selective station were obtained

Activities

- Usage of bio humus as the best organic fertilizer in the fields and orchards
- Cultivating, fertilizing and seeding
- Right pruning of the trees
- Curing of the trees and seed-bed by using plants tincture
- Usage of biological traps against *seedworm*

- Experimental fields and orchards for organic farming system

Schemes of crop rotation for the first year for Fantan and Dzoraghbyur

Year	**Plot 1**	**Plot 2**	**Plot 3**	**Plot 4**	**Plot 5**
2006	**Spelt + Onobr. Fertil.**	**Spring barley + onobr. Fertil.**	**Spring barley Fertil.**	**Spring barley No Fertil.**	**Spelt + Onobr. No Fertil.**

Year	Plot 1	Plot 2	Plot 3	Plot 4	Plot 5
2006	Onobr.	Pea	Pea	Alfalfa	Alfalfa
	Fertil.	Fertil.	Fertil.	Fertil.	Fertil.

Both crop rotation schemes include the Legume perennial grass, which enrich the soil with biological nitrogen.

onobrychis

Medicago

Bio humus as the best organic fertilizer.

Cultivation of the soil, fertilising and seeding by tight methods


Spelt, spring barley with onobrychis in different stages

3,3 ha alfalfa field in Hayanist for organic orchard

Fertilising of the trees by bio humus

Pest Control by using plant liquids - tincture from wormwoods (Artemisia absinthium) and milfoil (Achillea millefolium) composition:
10 litres of water to 1 litre of plant tincture

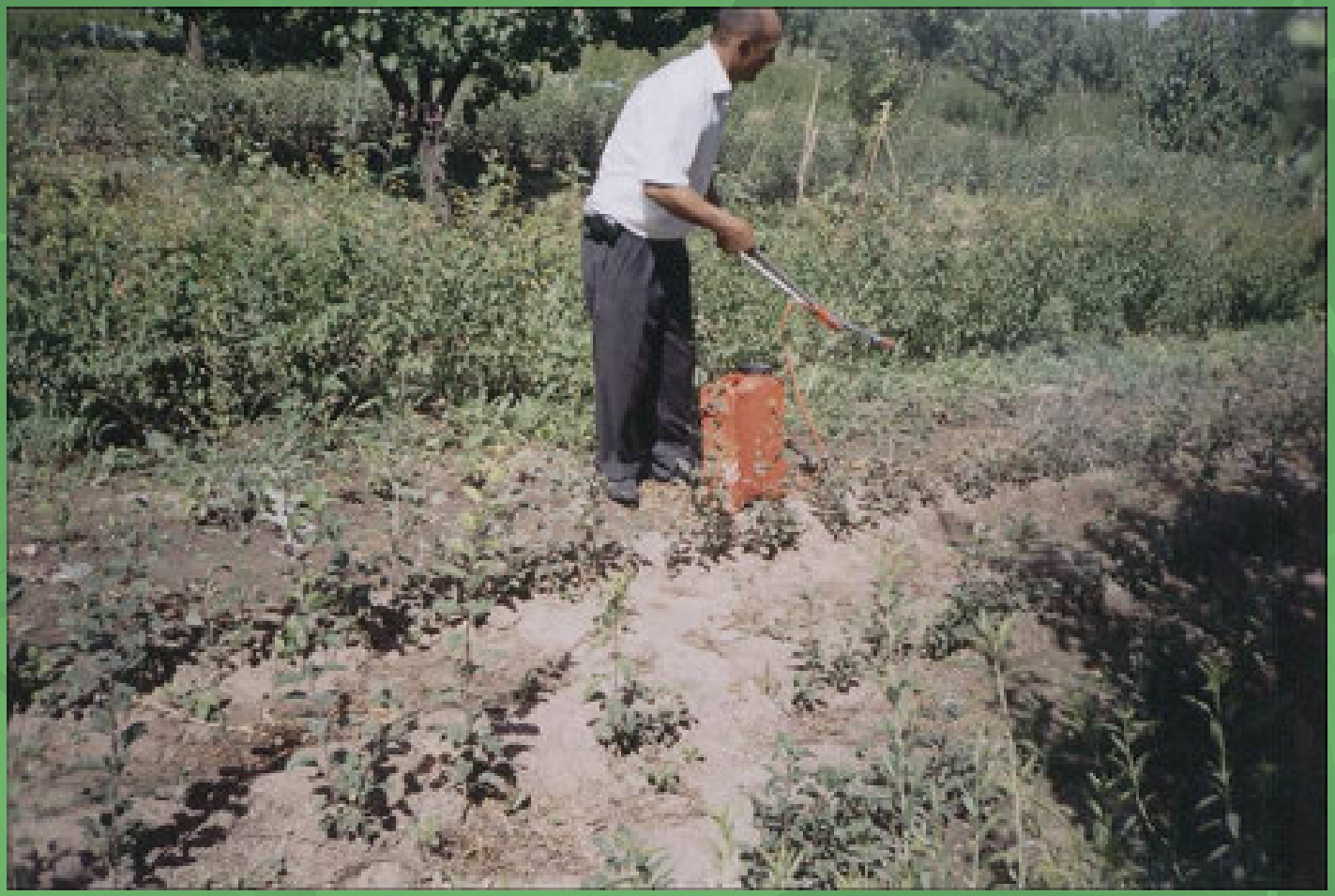
Wormwood, common

Milfoil

- **The pests which damage the yields**
- **MILDEW (*Podosphaera leucotricha* ELL. ET EV./SALM.)**
- **APHID (*Homoptera, Aphididae)***
- **PRUNUS DULCIS** (Clasterosporium carpophilum Aderh.)
- **SEEDWORM *(Carpocapsa (Laspeyresia) pomonella) ...***

- Curing of the trees, using plant tincture instead of pesticides

- Curing in Dzoraghbyur seed-bed



- 2 biological (pheromone) traps in each orchard against *(Laspeyresia) seedworm*

Monitoring before the curing and after it


Thank You For Your
Attention