Sustainable agriculture in Armenian villages: Fantan, Dzoraghbyur and Hayanist
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 meeting 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

<table>
<thead>
<tr>
<th>Year</th>
<th>Plot 1</th>
<th>Plot 2</th>
<th>Plot 3</th>
<th>Plot 4</th>
<th>Plot 5</th>
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<tbody>
<tr>
<td>2006</td>
<td>Onobr. Pea</td>
<td>Pea</td>
<td>Pea</td>
<td>Alfalfa</td>
<td>Alfalfa</td>
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</tbody>
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Both crop rotation schemes include the Legume perennial grass, which enrich the soil with biological nitrogen.
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.
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