

7° Meeting internazionale



Comune di Atri

ENOAS European Network of Organic Agriculture Students

REGIONE
ABRUZZO



Dal 2 al 9 settembre - Sette giorni di agricoltura biologica
tra professionisti e studenti europei del settore

Istituto
Abruzzese
per le aree
protette

Organizzato dalla
Riserva Naturale Regionale
"Calanchi di Atri"

ASSOCIAZIONE
Libera@ente
CULTURALE



COLDIRETTI



UNIVERSITÀ
DEGLI STUDI
DI TERAMO



2/9 September - ATRI (TERAMO) - IT

avalon
promoting organic farming

ENOAS 2009

"BADLANDS ARE NOT SO BAD"
(I calanchi non sono poi così male)

Final report

1 - NATURAL REGIONAL RESERVE "CALANCHI DI ATRI"

1.1 AREA SURVEY

The surface of the Natural Regional Reserve "Calanchi di Atri" is extended for about 380 hectares, over the hilly strip comprehended between the Italian Apennine mountains and Adriatic coast line.

What describes better the local badland soil is a high rate of Pliocenic clays and slime. Indeed, during Pliocene age, all surface belonging to the Reserve was covered by an extended Adriatic sea, as consequence deep soil stratifications present a high salt rate still today. As we can deduce by soil chemistry elements, high sodium rate can lower cohesion between soil particles. Rightly for that, after the last glaciers breakup (Würmian Age), huge water flows generated a remarkable rill erosions able to generate the actual Canyon-like landscape.

Badlands are one of the most suggestive and geological interesting elements of our land, in the whole Italian territory they are very common, those of Atri are well known by scientists for their huge dimensions and shapes.

Neighbouring lands next to the "calanchi" have an evident erosive gradient, it means that they cannot tolerate "heavy" agriculture, in every case they have been cultivated since Roman age having peak of exploited surface during the '50, after the second world war.

Due to the high erosive risk, agriculturists are forced often to adopt organic agriculture solutions.

The Natural Regional Reserve "Calanchi di Atri" is concerned in quite all its surface by badlands phenomena (fenomeni calanchivi) and rill erosion, caused by geologic events and sometimes by human activities weakening soils.

Natural Regional Reserve "Calanchi di Atri" is an institution involved since its born in the promotion of sustainable agriculture respecting biodiversity and environmental natural balances.

As to understand and to study better erosive dynamics, geological differences and more correct cultivation, in 2007 the Reserve institution began to promote the Geomorphologic observatory project.

1.2 GEOMORPHOLOGICAL OBSERVATORY

Main activities of Geomorphological observatory project (cofinancing the ENOAS 2009 summit), furthermore topics of the projects "Colture e Culture" and "La Pac nelle aree protette" (supported by the same Riserva Regionale "Calanchi di Atri"), were presented to ENOAS participants. Main topics of the 3 projects can be summarized as below:

- Promotion of natural engineering construction sites directed to agriculture operators living in the territory of the badland area (Geomorphological observatory);
- Making aware operators of technical and environmental dangers in marginal lands territories (Geomorphological observatory);
- Didactic activities for schools (Geomorphological observatory);
- Managing of streams, water and drainage systems (Geomorphological observatory);
- Awareness of local species and cultivars present in the territory (Colture e culture);
- Info campaign to understand the Rural Development Plan 2007/2013 (La PAC nelle aree protette).

ENOAS 2009 has been focused on the organic agriculture potentialities in marginal lands.

Water stress and long periods of high insulation due to Mediterranean climate, induce cultivated plants to produce huge quantities of molecules (essential oils, alcohols, flavonoids, essudates, etc...) useful in symbiotic or defending plant behavior (for example seeding, cross pollination or mycorrhiza association).

Students and technicians, coming from northern Europe, discovered in this way conditions related to Mediterranean agriculture in marginal lands, living the local territory by analyzing directly edaphic factors, working strategies and local markets state (weaving factories, inputs and outputs).

Days and arguments have been divided as explained in the synoptic table attached.

Day Sep	Place - Main themes	Lesson held by	Arguments
Wed 2 nd	Arrival of the participants		
Thu 3 rd	Visit of the Natural Reserve "Calanchi di Atri": - Ecological introduction 	Doc. Adriano De Ascentiis (Nature and environment scientist) Doc. Angelantonio D'Amario (Agriculture, Forest and environment scientist)	Geological origin of the Calanchi Spontaneous Flora and fauna Typical cultivations Aims of the Geomorphological observatory Samples of erosion and methods to avoid soil exploiting
	Visit of Cerniero's farm – Atri (TE) – farm belonging to the Reserve territory 	Doc. Umberto Di Loreto (Food technologist) Davide Cerniero (farm operator and direct seller)	Most common Cow Races Overview on milk characteristics Typical products such as cheeses and mozzarella coming from milk Cow breeding technology Milk self service machineries
	- Visit of Cacciatore Bros' farm – farm belonging to the Reserve territory	Doc. Umberto Di Loreto (Food technologist) Giuliano Cacciatore (farm operator and	Ecology and ethology of bees Bee diseases, molecules and

		<p>direct seller)</p>	<p>pesticides influencing bee life</p> <p>Overview on honey characteristics</p> <p>Experiments of marketable natural products coming from pollen</p> <p>Flower mixtures and honey market offer</p>
	<p>Visit of the historic centre of Atri</p>	<p>Guided tour</p>	
<p>Fri 4rd</p>	<p>Forese's Robotic breeding and dairy farm-Pineto (TE)</p>  <p>Az. Agr. "Forese" C.da Forcone Pineto (TE)</p>	<p>Antonio Forese (operator and direct seller)</p>	<p>Time optimization in a robotic breeding</p> <p>Computer animal control</p> <p>Dejection excrements</p>

	<p>Cilli's beach / Presentation of Favurisc' producers association</p>  <p>Lecture: la transumanza (movement of sheep flocks to find new fresh pastures) – Cilli's beach / Pineto (TE)</p>  <p>Ass. Agr. "PAVURISC" "Coop. Agr. Masseria del Parco" Aggloamping Cilli Pineto (TE)</p>	<p>Doc. Umberto Di Loreto (Food technologist)</p> <p>Agr. Donato Di Marco (Vice President of Province of Teramo C.I.A. Confederazione Italiana Agricoltori)</p> <p>Fiorenzo Sarto (operator and pecorino cheese producer – Vice President of the Coop. Agricola Masserie del Parco)</p>	<p>A project promoting agriculture products between beach tourists – Organic wine producers</p> <p>Historical economic importance of sheep flocks in Region Abruzzo</p> <p>The history and the chemistry of the Method to produce the "Pecorino di Farindola" (sheep milk fermented by using pig curdle)</p>
<p>Sat 5th</p>	<p>Candelori's mill - Atri (Teramo)</p>	<p>Candelori Gianluca (owner of the mill)</p>	<p>International grains and flour market</p> <p>Industrial system and transformation</p>

			<p>phases</p> <p>Cereal quality tests</p>
<p>Regal pasta factory – Pineto (Teramo)</p>		<p>Doc. Lucio Di Felice (marketing and process responsible of the pasta factory)</p>	<p>Lesson on the technical processes analyzed step by step until packaging the product</p> <p>Development of the organic pasta market, needs of an organic process.</p> <p>Problem in payments delays and large distribution risks.</p>
<p>De Ascentiis' farm – Atri (Teramo)</p>		<p>Doc. Adriano De Ascentiis</p>	<p>Experiment in organic chicken breeding – local old races (gallina nera atriana)</p> <p>Lecture about fig tree varieties</p>

	<p>Botanic Garden/Green house/agri-enterprise - "Giardino officinale" - Santa Maria di Propezzano - Notaresco (TE)</p>  <p>Az. Agr. "Giardino Officinale" Loc. Santa Maria di Propezzano Roseto degli Abruzzi (TE)</p>	<p>Agr. techn. Filippo Torzolini</p>	<p>Species and varieties used for human therapy or insects deterrent.</p> <p>Natural molecules or semi-artificial principles used in organic agriculture</p> <p>How to manage an organic botanic garden</p> <p>Products and distillation of essential oils</p>
<p>Sun 6th</p>	<p>Asinomania – Italian donkey races bank – Anversa degli Abruzzi (AQ)</p>  <p>Asinomania - Anversa degli Abruzzi</p>	<p>Eugenio Milonis (operator and owner of the breeding)</p>	<p>Donkey in the history</p> <p>Characteristics of donkey milk</p> <p>Products coming from d. milk</p> <p>Donkey therapy</p> <p>Donkey Italian race/gene bank</p>
	<p>Visit of the historic centre of Anversa degli Abruzzi (AQ)- Hearth of Abruzzo</p>	<p>Doc. Filomena Ricci (Environment scientist)</p>	<p>Short journey of the historic centre of Anversa degli Abruzzi.</p>
	<p>Visit of "Cavuto" Botanic Garden – Anversa degli Abruzzi</p>	<p>Doc. Attilio Di Giustino (Nature and environment scientist – responsible of the Botanic garden of Anversa degli Abruzzi)</p>	<p>Marginal mountain land cultivation and mountain products managing</p> <p>The importance of species' conservation in a seed-banks</p>

			Seed exchange networks
Mon 7 th	<p>Visit of the Natural Regional Reserve Lake of Penne – Penne (PE)</p> 	Doc. Damiano Ricci (Lawyer and Enviroment centre responsible)	<p>Project Cogestre – promoted by Natural Regional Reserve Lake of Penne</p> <p>Cultivation and transformation of old cereals varieties.</p> <p>Organic product sellers and dealers</p> <p>Solar energy system linked to Hydrogen stocking</p>
	<p>It was planned for the afternoon to visit Campo imperatore and Gran Sasso mountain during the late afternoon, but weather conditions didn't allow us to get the journey. We replaced the visit with 2 lessons given by: Mr. Pietro Czegledi (Organic Orchard owner - Hungary), Doc. David Hobson (Assistant researcher – expert in the using of microbiology in organic Cherry Orchard – University Nova Scotia Agricultural College)</p>	<p>Pietro Czegledi (Organic Orchard owner - Hungary)</p> <p>Doc. David Hobson (Assistant researcher – University of Nova Scotia Agricultural College)</p>	<p>Organic fruit market in Hungary</p> <p>Cydia Molesta and Cydia Pomonella attacks</p> <p>Sale problems related to damaged fruit</p> <p>Using of fungus (mycorrhization) to better resistance of Prunus avium to</p>

			<p>pathogens</p> <p>Some examples of mycorrhization in nature.</p>
<p>Tue 8th</p>	<p>Olive plants for olive oil – Factory of D’Amario Giacomo e Domenicantonio – San Giacomo di Atri – Rural village of the territory of Atri</p>  <p>05:30 pm / 00:00 am BIO-Expo – Villa Comunale di Atri – Municipaty of Atri Park</p>	<p>Giacomo D’Amario (IAP – Imprenditore Agricolo a Titolo Principale – Enterpreurer and owner of a olive oil traditional factory)</p> <p>Antonio Capanna Piscé – manager, operator in an olive oil modern factory</p> <p>Prof. Emilio Chiodo – Faculty of Agraria - University of Teramo</p>	<p>Big olive oil presses factory (traditional method)</p> <p>Olive oil centrifuge factory (modern method proper for organic products)</p> <p>Lecture about olive tree cultivation (preferred soil, local cultivated varieties, different kind of plants optimized to fit in the farm surface, pruning)</p> <p>Market state of organic product in Abruzzo</p> <p>Percentages of cultivated areas and percentage of organic in the regional agri-food market.</p> <p>The 2 most frequent certified organic agricultural products: oil and hay</p>

		<p>Organized rightly for the Enoas week by the Natural Regional Reserve. Participation of 35 farmers – exhibition, gourmet and direct sale of organic and typic agri-products coming from 3 different regions (Abruzzo, Marche and Apulia)</p> <p>Meeting during the Bio-expo with Regional WWF Oasis Responsible Augusto De Sanctis and Regional responsible of agriculture subsidies.</p>	<p>CIA and Coldiretti (national labor unions)members producing organic.</p> <p>3000 square metres of stands.</p> <p>Questions to producers</p>
Wed 9 th	Departure of the participants		

The realized certified organic farming in Abruzzo represent in surface a percentage below 8%, that is the reason why Managing Technical Board of the Riserva Naturale dei Calanchi di Atri would like to make easier the conversion of the farms into organic system working on decreasing certification costs and creating technical agreement among producers.

Positive consequences of organic farming over the environment are irrefutable both for biodiversity and for human health.

Unfortunately, as the ENOAS participants realized, many producers do not believe in the organic certification system, their clichés are quite always the same:

- Certification institutes are seen as private subjects giving their service only for money, generally they provide only the final step of organic warrantee, forgetting at all a real and technical customer support during the productive process. Very often, local certifiers are people not skilled in food, agriculture, nature or environment sciences;
- Organic farming means loose of money, because of the low production but it also represents a lack in interest by local market;

These stereotypes unfortunately have a great influence over the majority of operators; so having scientific contacts and debates as during ENOAS 2009 week, could represent the way to convince producers for conversion.

As all the participants realised, some of the analyzed and tasted products are consequences of old traditions, so very often steps to transform them into organic certified really fews.

One of the strategies to involve people in the organic market has been the idea to organise a bio-expò (an open space exhibition of typical and organic products) for the last meeting day. It has been the first event of this genre in our territory, involving so students, academics, producers, cooperatives, agriculturist associations (Liberamente – Castilenti - TE) national labor unions (**CIA** - Confederazione Italiana Agricoltori and **Coldiretti**), certification services.

Riserva managing board decided to select farms by preferring the most original idea or whatever inviting economically sane enterprises for this occasion. This event was engaged 37 producers coming from 3 Regions: Abruzzo, Puglia and Marche, organisation provided light system and stands to expose.

Gourmets have been offered for free to the Enoas participants, to interested people, and to tourists.

News about the whole week in particular about the Bio-expo event have been announced by internet (expecially: riservacalanchiatri.it, wwf.it, provincial.teramo.it, regione.abruzzo.com, facebook groups, and mailing list), radio (regional stations), TV (TV6, TV-Atri), and newspapers (Il Centro and Il Messaggero); keeping focus on the roles in organic farming invested by Avalon, WWF and by the Natural Regional Reserve institution.

All the week represented so a series of events giving resonance to organic farming; during all the days we tried to come closer to the significance of environment respect, letting people know about sane and brave enterprises active in the organic market at the same time.

A common and shared idea after all these activities is to maintain continuity in the organic market promotion and in the organic producers' consultancy.

During the days, debates among students, researchers and operators suggested to draw up a solution sheet to develop organic agriculture in our territory, they'll be summarized in 20 topics (divided in two sections economic and technical improvements).

**Organic farming development in the Regional Natural Reserve
"Calanchi di Atri", 10 lines to follow to develop the local market:**

- 1- Markets similar to the Bio - Expo in the most important towns once or twice a year with producers from all region – named “local food festivals”. They can be organised like an event itself or can be organized as a part of other events;
- 2- Local organic food markets – at least once a month;
- 3- Starting points composed by few organic producers with very attractive products, development of self service machineries for fruits (non so common as in northern countries);
- 3- Providing only organic agriculture products during seminars, meetings and etc. organised by WWF and its partners;
- 4- Staying in contact with buying-groups, as to guarantee a lower and more convenient price;
- 5- Keeping informed about research and experimentation opportunities in organic agriculture (such as OIGA – Observatory of Young Agriculture Entrepreneurships – Italian Ministry of Agriculture);
- 6- International collaboration to share “know hows” and to create new sale channels in Europe (only for those products typical of the Mediterranean agriculture);
- 7- Implementation of an organic farm interactive map on the institutional site of the Regional Natural Reserve “Calanchi di Atri”;
- 8- Awareness in local programs to decrease CO2 in agriculture, through the participation in the Sustainable Energy Action Plan (Province of Teramo is one of the 5 Italian Provinces named to support technically for 47 municipalities);
- 9- A stable district Info-point for operators, giving technical and financial support (EU subsidies);
- 10- Registration of a territory organic Trademark

Organic farming development in the Regional Natural Reserve “Calanchi di Atri”, 10 lines to follow for technical improvements:

- 1- Promote certification by involving more producers, reducing so the price for the practice;
- 2- Promote the importance of skilled inspectors;
- 3- Promotional campaigns to develop the use of products of organic agriculture; inviting enterprises producing pheromones or chromo-tropic traps / or natural deterrents coming from plants;

4- Huge cultivated surfaces are more sensitive to disease, so promoting suggestions about ideal cultivations in specific areas of the Reserve using GIS technology, realizing a land database of the local territory (ex: Zea mais cultivated where water is not available);

5- Promotion, research and classification of old cultivar used for man or animal feeding (Olea europaea cv, Ficus carica cv, Glycyrriza glabra, Lycopersicum esculentum, Malus spp and cv, Prunus spp cv, Vitis vinifera cv, Triticum spp and Hedysarum coronarium ecotypes, and other species dealt during the project "Colture e Culture");

6- Promotion, research and classification of old animal races (Gallus gallus races);

7- Control of animal flocks and pastures in marginal lands as to avoid topsoil exploiting and the starting of rill erosion phenomenon;

8- Avoid deep ploughs to prevent clay layer outcome and promote organic fertilization (ICRO is the a compost factory present in Atri, managing big quantities of organic matter, actually its incomes are related mainly to garbage disposal public subsidies);

9- Maintaining of the Geomorphologic Observatory service and overseeing of high risk hydrogeological areas;

10- Agreements between land owners to institute organic agriculture valleys (organic districts), and normalise natural conditions and avoid neighbours' pollution contaminations.