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*poster*

**ON FARM CONSERVATION AND USE OF OLD POTATO VARIETIES  
IN LIGURIA REGION**

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Historical sources testify that the potato was introduced into the Liguria region, in Northern Italy, during the second half of the XVIIIth century. Names used at that times, referring directly to the different phenotypes, include "rosse tonde" (red and round), "bianche bernoccolute" (white and lumpy) and "bianche bislunghe" (white and oblong). In 1794, a farmer affirmed the existence of six different varieties, the most spread of which were a white round potato with small red spots. Little more than this is known about these ancient varieties. An inventory of the number of local heritage varieties still grown by few farmers today has been undertaken as part of survey by M. Angelini. This revealed that cultivars such as the so-called (by public notoriety) "Quarantina", "Cannellina" and "Brügnöa" were still largely grown in the genoise mountain hinterland in the beginning of our century, much before varieties such as "Allerfrüheste Gelbe" and "Majestic" were introduced from northern Europe, replacing them.

MATERIALS AND METHODS

During the year 1996 a territorial survey has been undertaken by Angelini on the Ligurian and Piedmont Apennine. All the samples founded were distinguished by the geographical coordinates, name of the grower, ethnographical data and local name of the landrace. The samples collected were planted in one farm to compare the morphological characteristics. Tubers of each accession were sent to CISA Mario Neri in order to assess the presence of bacterial and viral

diseases. During the year 1998 all the accession were characterized with standard UPOV descriptors and quality cooking behavior was assessed at the end of the storage (+6°C).

## RESULTS AND DISCUSSION

The subsequent territorial survey undertaken in the years 1983 and 1996 has confirmed the progressive disappearance of the local growers from 40 (1983) to 15 (1996) mostly due to the old age of the "maintainers". In 1997 and 1998 some of these maintainers were implemented in a local project based on a partnership agreement between CISA (Imola) and CHARTA s.r.l. (Genova - environmental and historical researches) and funded mainly by Provincia of Genoa to continue the *in situ* multiplication, at higher altitude, of the three landraces "Quarantina", "Cannellina" and "Brügnöa". Those accession were infected by the viruses: PVY, PLRV, PVX and PVS. Apart from this infections the yield per plant were found not so very bad for "Quarantina" and "Cannellina" but very poor for "Brügnöa".

The landraces were well distinguished based on UPOV descriptors. "Quarantina" is an early potato, with round shaped tubers, pink deep eyes, good skin finish, white flesh and flower, culinary type B. "Brügnöa" has a particoloured skin (purple and cream), round or round-oval tubers, white flesh, purple flower. "Cannellina" is a very firm white fleshed variety, with long shape tubers, leather-coloured and resistant skin, light-purple and white flower, culinary type A.

This year we started virus cleaning through meristem culture and thermotherapy in order to improve the sanity and finally the yield of the landraces.

The virus free material will be conserved *ex situ* and *in situ* and improved seed multiplication undertaken for local growers.

The three landraces - above all the "Quarantina" - recently have been included in the "Arch" project promoted by Slow Food International. Agreements with local restaurants will ensure that the total production can be sold and used to prepare attractive local dishes made from a high quality product. Production of the varieties is being undertaken

organically in a mountainous environment, in terraced land, where conditions would not be suitable for high yielding modern varieties. The promotion of the cultivation and use of local varieties is enabling a form of sustainable on farm conservation and the rediscovery and diffusion of local knowledges and local tastes, is an additional element of this project which is enabling the genetic resources to be conserved and the value of these historical, environmental and, not least, economical resources to be highlighted.

#### ACKNOWLEDGEMENTS

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