



The Garlic Landrace of Resia (Eastern Italian Alps)

Delicate Managing of a Plant Genetic Resource in a Slavic Enclave



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Physical resources

The Friuli Venezia Giulia (FVG) region, at the crossroad of Latin, Slavic and Germanic cultures, is a land of differences. Three out of five biogeographical regions of Europe (Alpine, Continental and Mediterranean) can be found in FVG (Directive 92/43/CEE). An intriguing number of languages, dialects and idioms are spoken here. The alpine valley of Resia stretches 21 km W-E and is closed towards the Slovenian border by the Canin massif (2580 m). A small ethnic group with proto-Slavic roots settled in the valley, perhaps in the 7th Century. Until 1920, poor connections maintained the Resians separated from other communities. A high level of genetic isolation for Resia people has been recently assessed (Esko et al., 2013).

Language and cultural heritage

The idiom spoken in Resia, an old-rooted slovene dialect, is only one of the traits of the rich traditional heritage, as represented by music, dance, costumes of the past (Fig. 1). We suggested (Miceli et al., 2005) that such heritage could be relevant in safeguarding the *Allium* genetic resource.



Figure 1 - Carnival celebration in Resia
Photo: Prealpi Giulie Regional Park



Figure 2 - Garlic curling scape



Figure 3 - Maturing scape

Traditional economy and farming

In the past, Resian men were mainly craftsmen and seasonal migrants (knife grinders, umbrella menders, etc.). Farming relied on livestock pasturing and only partially on field crops. To date, home gardens provide room for kitchen crops, and particularly for the bolting garlic landrace, which is grown on a very small area (less than 1 ha). Garlic introduction in the valley is scarcely documented. At present, Resia bulbs are in demand among gourmets, due to their great flavor and taste. Topsets, normally removed, are also used as fresh or processed vegetables.

The garlic landrace (*strok*, in Resian dialect)

The landrace is a hardneck (bolting) garlic, tentatively assigned to the *ophioscorodon* group (Maaß and Klaas, 1995). Through reproductive stages, it develops a long and curling scape (fig. 2). As maturity approaches, the scape uncoils and the lumpy shape of the maturing umbel capsule is evident (fig. 3). A white spathe includes sterile flowers and topsets (fig. 4). Pink colored tunics wrap each of the 7-9 cloves per bulb, placed in a single whorl (fig. 5). Those traits indicate the garlic material as out of the subsp. *sativum* (Etoh and Simon, 2002). Bulbs are medium-sized, very aromatic and moderately storable. The Resians assign a special significance to the crop and, albeit at present the tiny growing area impairs economic sustainability, are definitely reluctant about possible extension of the cultivation outside Resia.

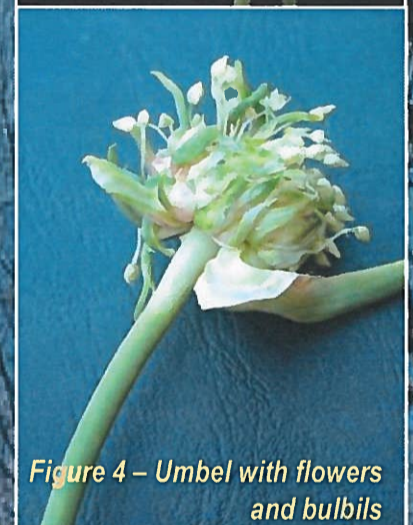


Figure 4 - Umbel with flowers and bulbils



Fig. 5 - Bulb sections

Conservation Variety vs. SlowFood promotion ?

Since 2003, Resia garlic was included in the FVG Repertoire of Landraces. The legislative conundrum about Conservation Varieties keeps the Resia garlic unresolved. By the year 2005, Resia garlic has been successfully included among SlowFood Presidia for FVG region. This casted new light at national level and prices rose dramatically. Resian garlic is presently sold at 3 to 5 times the price of other garlics. Indeed this is not negative, but difficulties to enlarge the crop outside typical growing area, coupled with inability to induce a more co-operative vision, are introducing stress and frictions across the small Resia community. Resians seem in favour of an unexpensive mark of origin (DECO in Italian), as a simple way to enable customers to distinguish the original produce from the material grown elsewhere. Is it the only way to go?

References

- Esko T. et al., 2013. Genetic characterization of northeastern Italian population isolates in the context of broader European genetic diversity. *Eur. J. Hum. Gen.* 21, 659-665.
- Etoh T. and P.W. Simon, 2002. Diversity, fertility and seed production of garlic. In: Rabinowitch & Currah (Eds.) *Allium Crop Sciences: Recent Advances*. CABI Publ. NY USA.
- Maaß H.I. and M. Klaas, 1995. Intraspecific differentiation of garlic (*Allium sativum* L.) by isozyme and RAPD markers. *Teor. Appl. Gen.* 91, 89-97.

- Miceli F. et al., 2007. Resia: a deep-rooted Slavic community in the Italian Alps and its garlic landrace. In: Bullitta S. (ed.) *Proc. 17th Eucarpia Genetic Resource Section Meeting - Plant Genetic Resources of Geographical and "other" Islands*. Castelsardo, Italy, CNR-ISPAM Sassari, Italy, pp. 257-259.