UMBRAFLOR S.R.L. – ISO 9001 CERTIFIED GARDEN CENTRE TRUFFLE-PRODUCING PLANT PRODUCTION, USING LOCAL TRUFFLES AND NATIVE SEEDS, CERTIFIED ACCORDING TO EUROPEAN (DIR. 1999/105/CE), NATIONAL (D.LGS 386/2003) AND REGIONAL LAWS

Moreno Moraldi

UmbraFlor s.r.l. Regional Garden Centre Director Via Castellaccio, 8 – 06038 SPELLO (PG) Italy – tel./fax 0742.315007 – direzione@umbraflor.it

The nursery "Il Castellaccio", managed by UmbraFlor s.r.l., has been making truffle-producing plants for 30 years, relying on the careful experience of its workers and of 5 graduates in Agronomy and Forest Science, present in the Company.

UmbraFlor s.r.l. is also well known for other garden products, such as in particular cancer-resistant cypresses, Dutch Elm Disease-resistant elms and walnut trees grafted with fruiting cultivars. Umbraflor s.r.l. has put much interest in the truffle-producing plant line production, due both to the local and national interest in this field, and to the direct effects on its turnover. All our greenhouses, recently renewed, have been designed to maintain strict sterile conditions, with air filtration systems and internal environmental parameters controlled by automated electronic stations. The average annual production is of about 30.000 plants, belonging to various forest plants and truffle species more suitable to the Italian habitats, with the exclusion of *Tuber magnatum* Pico.

All the production line, from the beginning to the final plant delivery to the customer, is daily monitored according to the ISO 9001 certification, which the Garden Centre has acquired several years ago.

To obtain truffle-producing plants, exclusively native seeds are utilized, certified on the basis of present rules (Dir. 1999/105/CE – D.lgs. 386/2003 – Regional laws and regulations in force in specific areas). The origin of both seeds and carpophores reflects the different Italian regions where UmbraFlor s.r.l. has its main markets.

All the carpophores, prior to the *inoculum*, are sectioned one by one and microscopically analysed by the University of Perugia, who verifies and guarantees the identity of the truffle species required by the nursery. In October and November, all the mycorrhized plants are controlled by the Department of Applied Biology of the University of Perugia, who certifies the plant quality for truffle cultivation.

This certification is issued on the basis of mycorrhizal morphology characterization, according to the agreement made in 1995 between ten Regions and eight University and Research Institutes. Following the Umbria Region Reg. 8/2007, this certification is granted also on the basis of biomolecular analyses, extended to all the marketed truffle-producing plants.