

4.1 = THE FORESTED AGRICULTURAL LANDSCAPE OF PISAN PLAIN: THE COLTANO ESTATE

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The Pisan plain, if we exclude the coastal sector covered by forests of the Regional Park of Migliarino S.Rossore Massaciuccoli (Selva Pisana), is characterized by a vast agricultural landscape. To the southwest of the urban area of Pisa meets a weak relief of Pleistocene deposits (max. 8.70 m asl, 700 ha) called Coltano. The area, which was, at least until late antiquity, a true island in a vast lagoon system, was the object, together with the entire surrounding area, of repeated attempts to reclaim from the Medici era (XVI century). The final reclamation (1920-1930) has radically changed the whole area and the great marshlands, in the low lands and covered with sedges and straws gave way to arable crops. The wooded area, ascribable before the reclamation, about 250 ha, was partially reduced but remained basically the initial design as well as providing fuel and hunting, and it continued to play an important role in protection of the agricultural crops from the sea winds (Fig. 1). Nowadays, where the forest survives (about 140 ha), to the thinness of the nemoral strips in the agricultural matrix, is associated, in contrast, a high peculiarity of vegetation. If you exclude some batches represented by plants of *Pinus pinea*, the seminatural wooded areas, no deeper than a few hundred meters, are largely represented by the woods on hydric soils hydromorphic (*Fraxino oxycarpae - Quercetum roboris*) of hygrophile peninsular geosigmetum of riparian vegetation, in catenal contact with more xeric woods of *Quercion ilicis* (habitat 91F0 and 9340). These forest habitats, rather common in the Pisan of the neighboring Park (1), however, constitute a relict woodland element with regard to the vast countryside outside Pisa Park. Of particular naturalistic relevance, are also worth mentioning the extensive populations of *Laurus nobilis*, which here should be to characterize the codominant tree layer of *Fraxino oxycarpae - Quercetum roboris* (Fig. 2). These phytocoenoses are not easily interpretable by phytosociological point of view, since their floristic cortege reveals in some cases elements of *Populetalia albae*, in other of *Quercetalia ilicis*, however seems can be related with reasonableness to the priority habitat 5230* (arborescent matorral of *Laurus nobilis*). The frequency and coverage of individuals of *L. nobilis* has reached values over time such as to induce the scientific community and local governments to establish in the northern sector, a nature reserve of about 9 ha called "Forest of laurels", considered by some authors, one of the few wild and spontaneous stations of *Laurus nobilis* of peninsular and insular Italy (2).



Fig. 1 The woods of Coltano Estate



Fig. 2. The wooded strips

1) P.E. Tomei, A.Bertacchi, A.Sani, M.Consiglio (2004) La vegetazione della Tenuta di S.Rossore. Note esplicative della Carta della Vegetazione di S.Rossore 1:10000, Pacini Eds, Pisa

2) G. Filibeck (2006) Webbia (61) 1:45-56

