

**INTERNATIONAL CROSS-COMPARISON COURSE ON FOREST
CONDITION – MEDITERRANEAN EUROPE**
Follonica, Italy, Sept. 27-30, 2009

**NEW PARAMETERS TO BE ASSESSED IN
THE D1 (TREE VITALITY) PLOTS**

QA Procedures

1. A National Manual is updated yearly. It includes specifics about biotic agents of national interest;
2. The Training Courses are carried out yearly before the assessment season (June – July), separately for the Mediterranean and Alpine regions (different species are assessed);
3. The teaching team includes experts in forest phytopatology and entomology;
4. An electronic (Power Point) photographic manual is being implemented for recognition of the symptoms in the main species (examples with relative codes are provided).

Ministero delle Politiche Agricole e Forestali
Corpo Forestale dello Stato
Ispettorato Generale



FOREST FOCUS
Reg CE 2152/03
Schema dell'Unione Europea
sulla Protezione delle Foreste contro l'Inquinamento Atmosferico



Rete Nazionale Integrata per il
CONtrollo degli ECOSistemi FORestali
CON.ECO.FOR

VALUTAZIONE DELLA CONDIZIONE DELLE CHIOME

MANUALE DI CAMPAGNA
(REV. 2 – GIUGNO 2006)

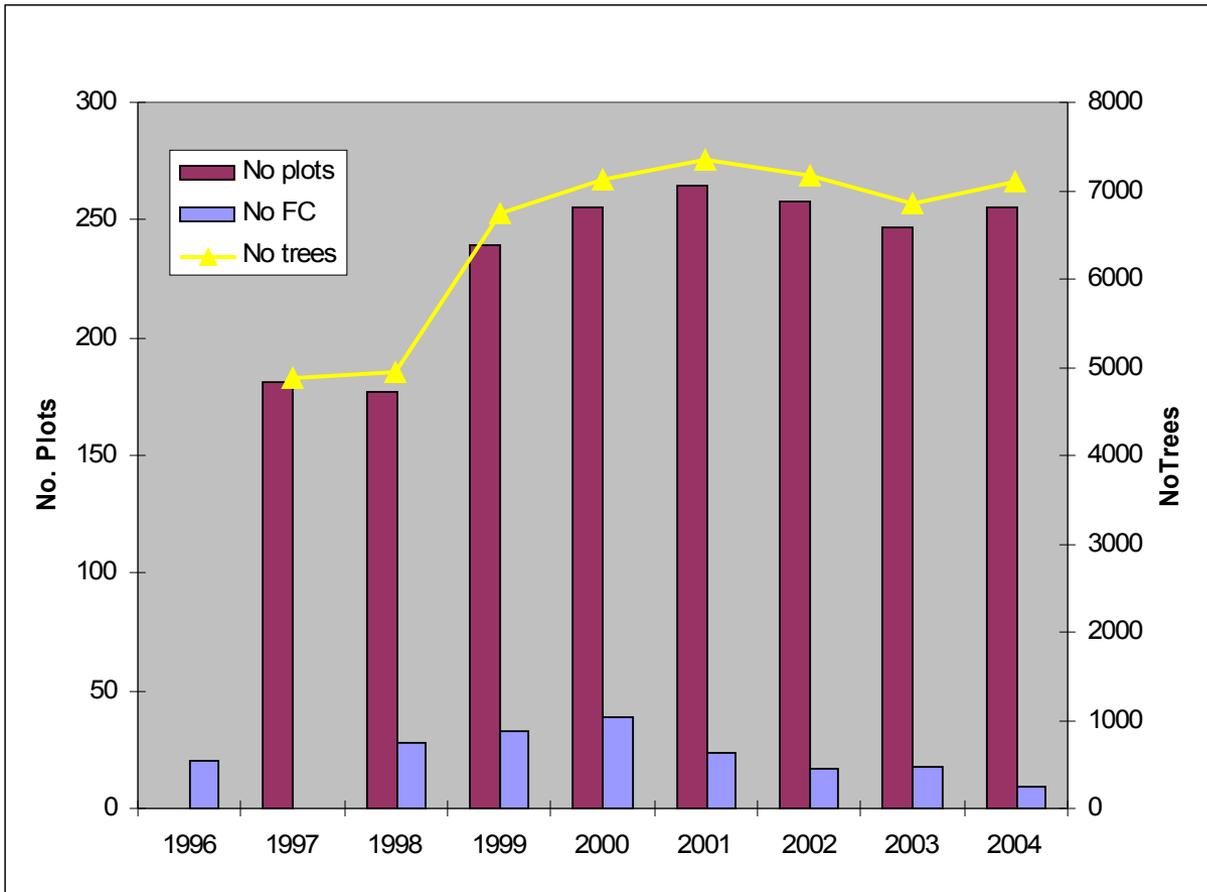
AUTORI

Filippo Bussotti

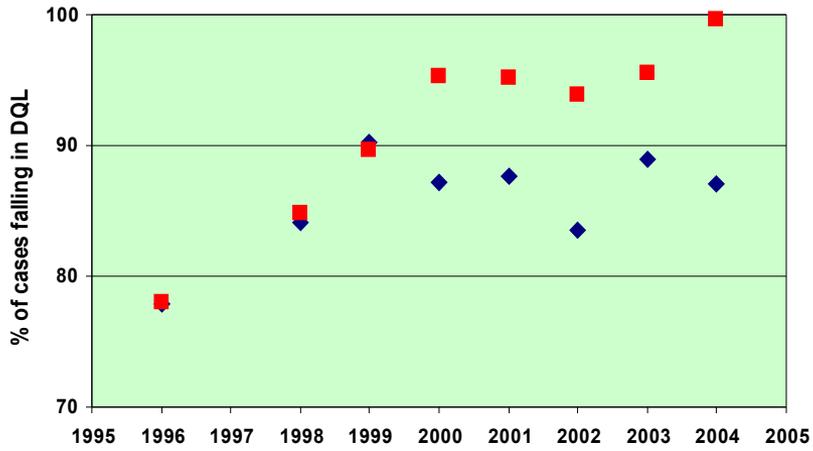
Davide Bettini, Enrico Cenni, Alberto Cozzi, Marco Ferretti, Renzo Nibbi
Paolo Capretti, Fabio Stergulc, Rizio Tiberi



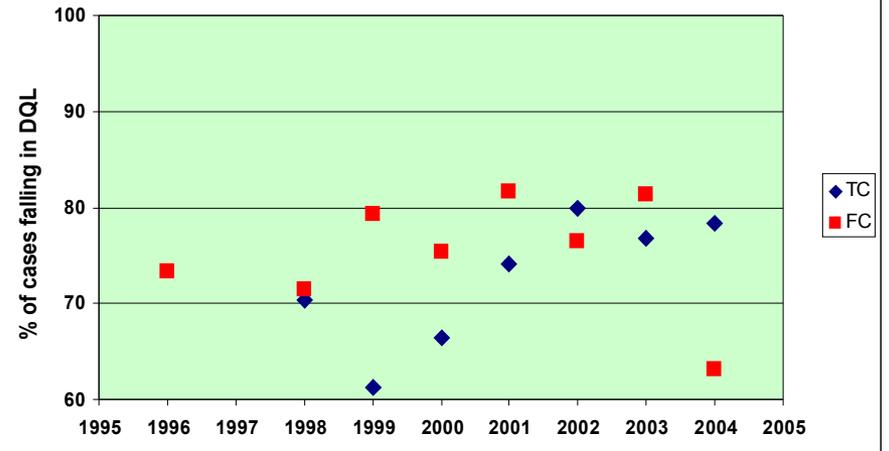
Università degli Studi di Firenze
Dipartimento di Biologia Vegetale, Laboratorio di Botanica Forestale ed Applicata



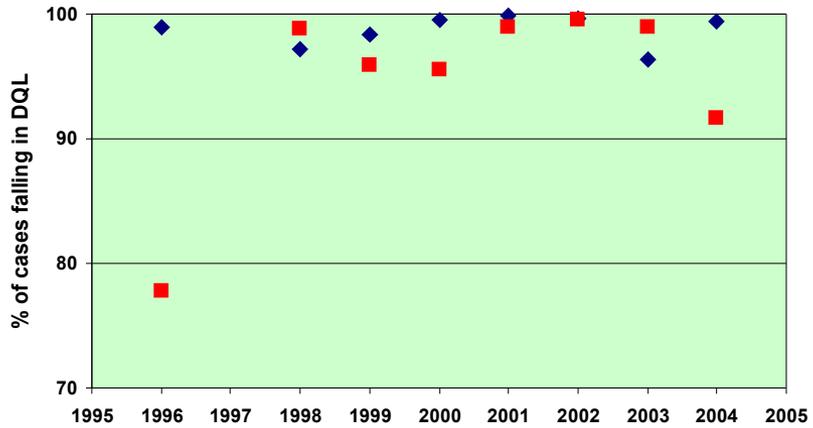
Defoliation



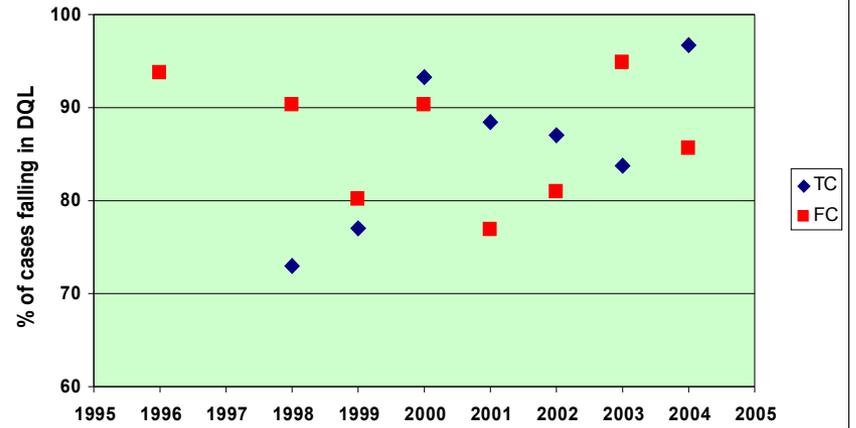
Insects



Discoloration



Fungi

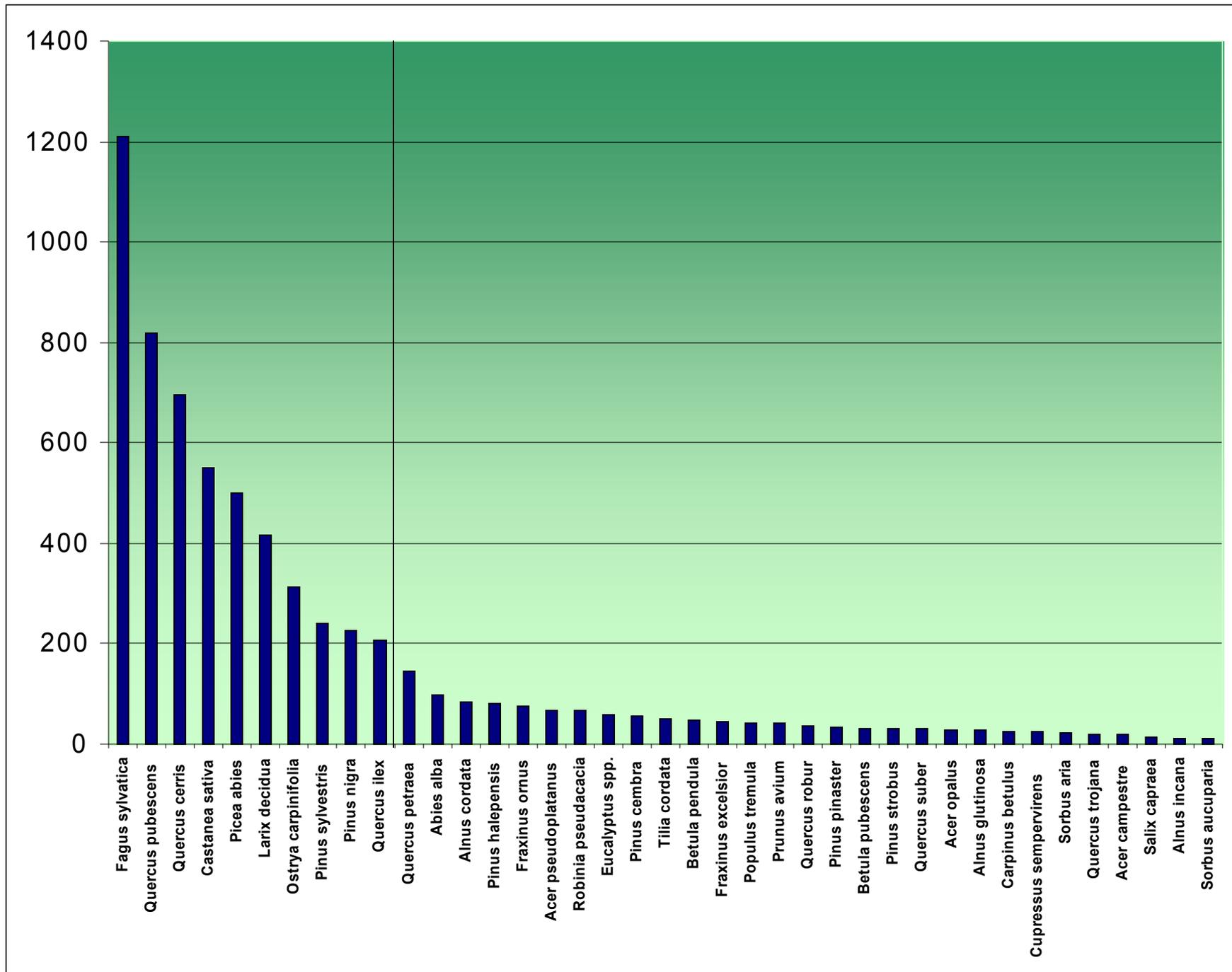


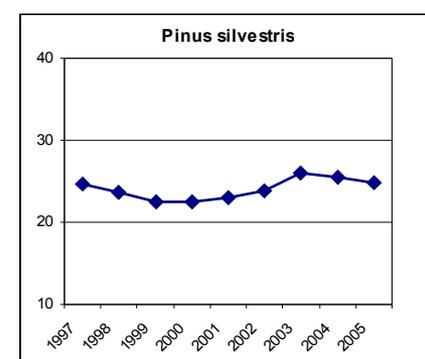
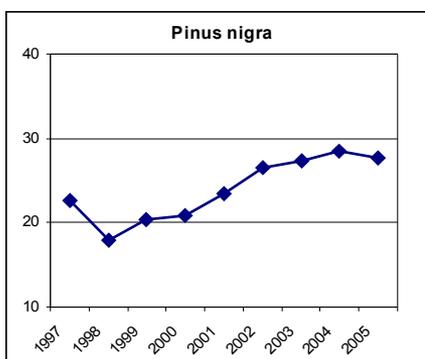
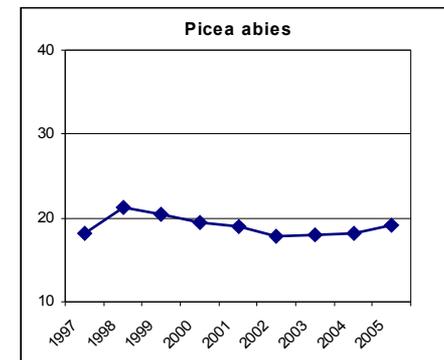
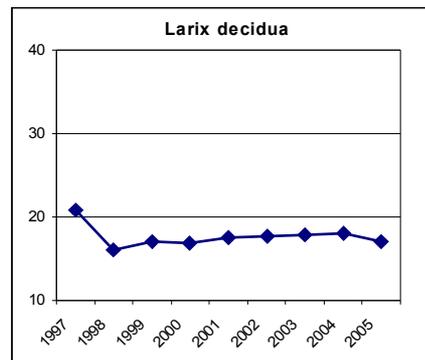
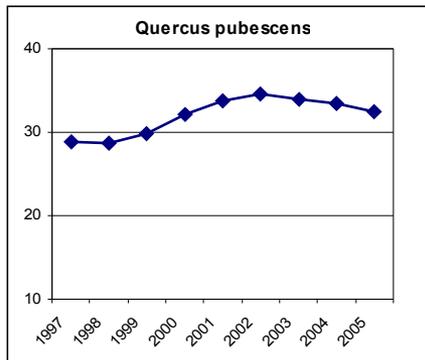
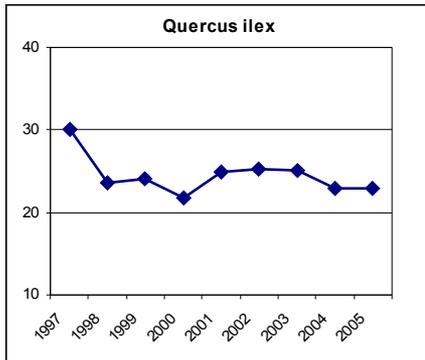
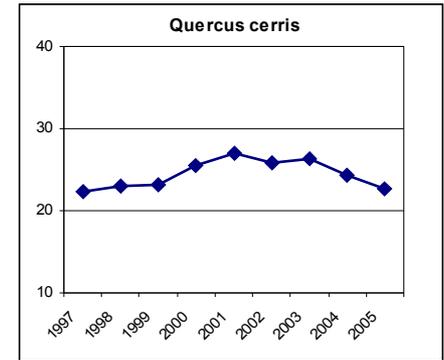
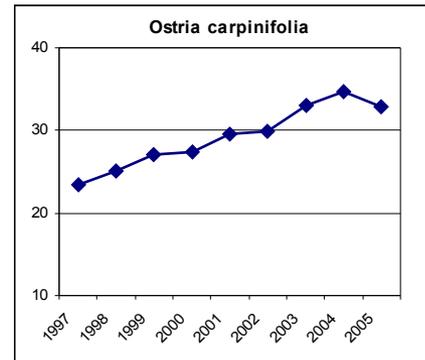
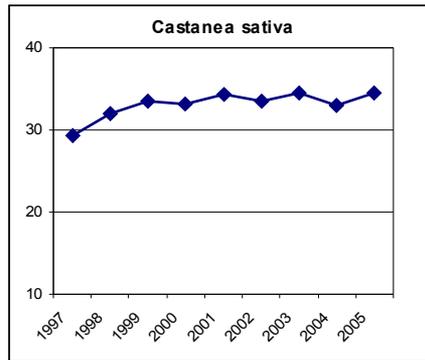
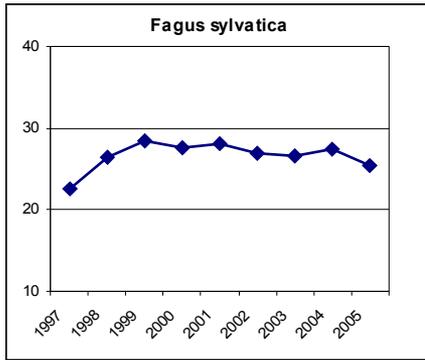
In 2005 and 2006 the QA programme was devoted to familiarize the crews with the assessment of damage agents (mainly biotics).

The system of code reporting has to be assimilated from the crews, and that create problems with the completeness and coherence of the observations reported in the field forms.

For these reason is being implemented a software to assist the crews in the compilation of the field forms.

Analysis of tendencies





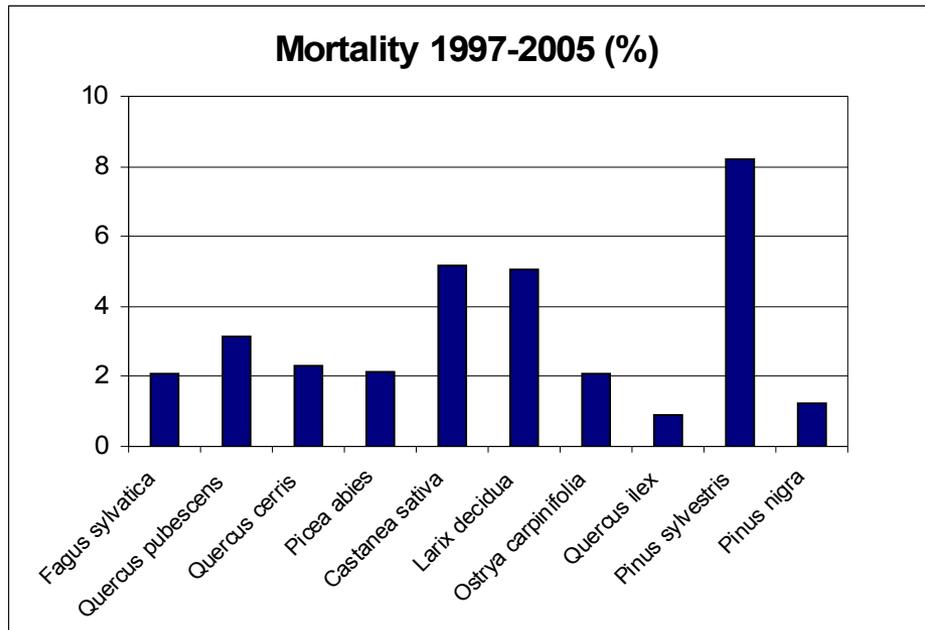
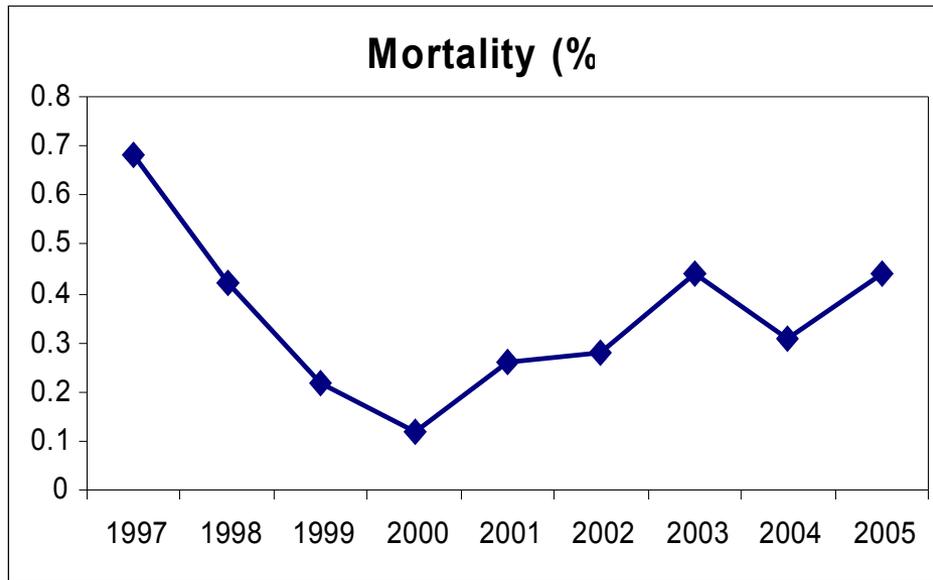
	p-level	r di Pearson
Fagus sylvatica	0.9661	0.2623
Castanea sativa	0.0298	0.7282
Ostria carpinifolia	0.0001	0.9664
Quercus cerris	0.4064	0.3183
Quercus ilex	0.3807	-0.4766
Quercus pubescens	0.0358	0.7974
Larix decidua	0.5755	-0.2274
Picea abies	0.3558	-0.4375
Pinus nigra	0.0016	0.8683
Pinus silvestris	0.1116	0.4982

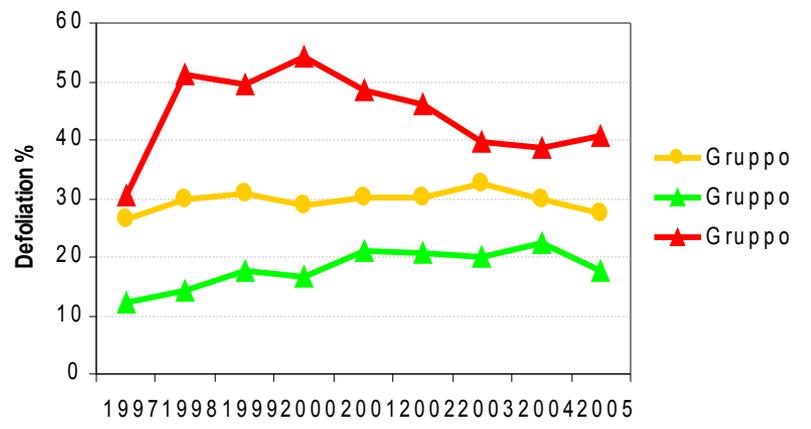
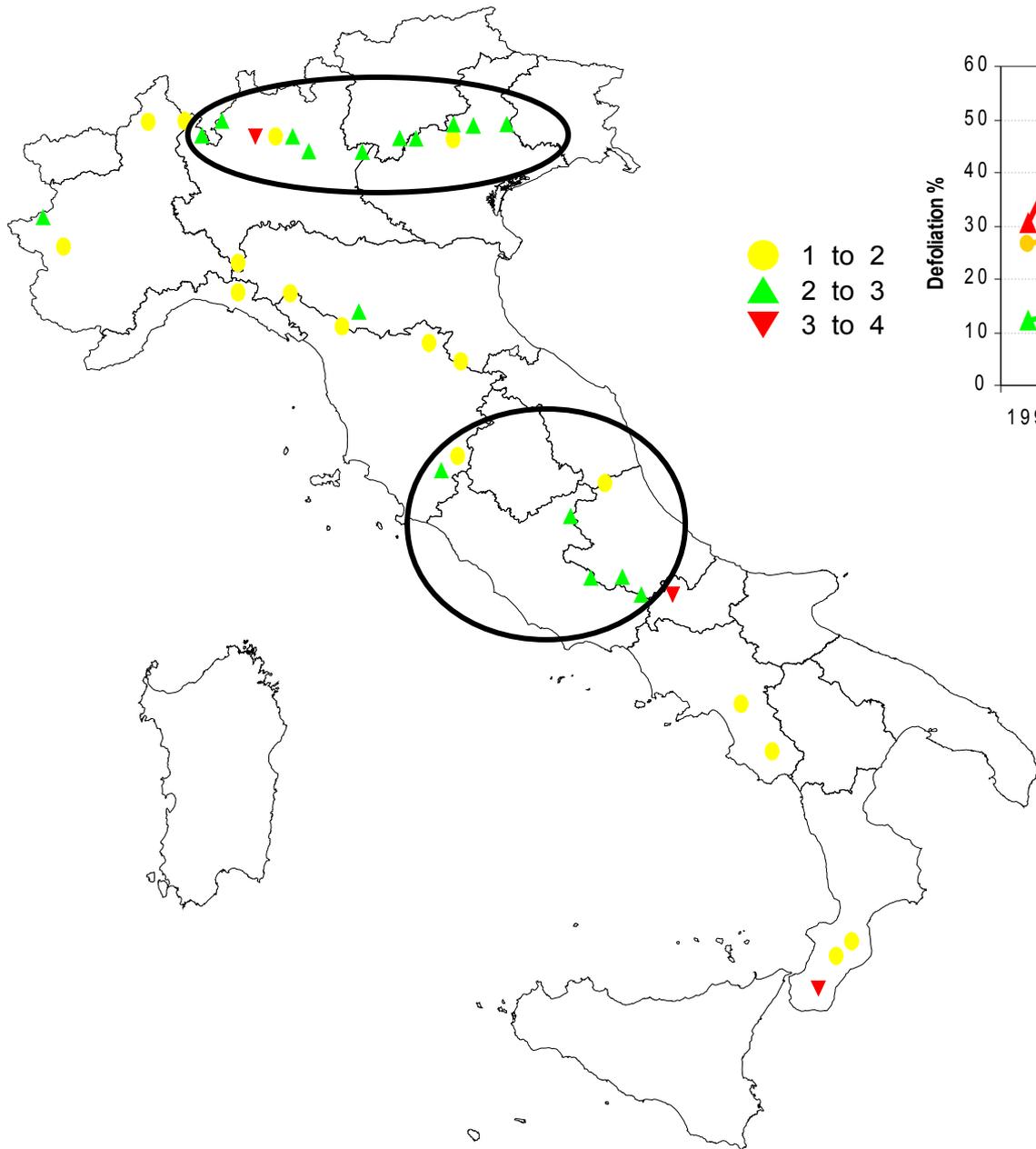
Castanea sativa: fungi disease

Ostrya carpinifolia: ageing and competition

Quercus pubescens: environmental constraints
and weakness parasites

Pinus nigra: ageing of artificial stands, often in
bad environmental conditions





Conclusions

1. The trends are species-specific; the species behave according their ecological and pathological characteristics
2. An increase of mortality was observed in the dry year 2003 and following. It affected mostly *Pinus sylvestris*;
3. *Fagus sylvatica* is the only species evenly distributed in Italy. Different defoliation patterns may be observed at regional level.