Appendix 3 - Correspondences among HFCs, vegetation classes (at national level, *sensu* Blasi 2010), and CORINE biotopes (*sensu* Amadei et al. 2003)

HFCs	CORINE BIOTOPES	Geo-synphytosociology Classification	Phytosociological Syntaxonomic System	
		Sigmeta	**Order^{+} Alliance** and suballiance*****	**Association**
HO	45.3	Peninsular neutrobasiphilous series of holm oak(*Cyclaminohederifolii-Quercoilicissigmetum*)	**Quercion ilicis*	*Cyclamino hederifolii-Quercetum ilicis*
		Italian Thyrrenian indifferent edaphic series of holm oak (*Cyclaminorepandi-Quercoilicis*)		*Cyclamino repandi-Quercetum ilicis*
		Southern Apennine neutral basiphilous series of holm oak (*Festucoexaltatae-Quercoilicissigmetum*)		*Cytisophyllo sessilifolii-Quercetum ilicis*
				Festuco exaltatae-Quercetum ilicis
		Central Apennine calcicole series of holm oak (*Cephalantherolongifoliae-Quercoilicissigmentum*)		*Cephalanthero longifoliae-Quercetum ilicis*
CO	41.21	Central Thyrreninan sub acidophilous series of cork oak *(Cytisovillosi-Quercosuberissigmetum*)		*Cytiso villosi-Quercetum suberis*
		Siliciphilous series of Lazio with cork oak and Hungarian oak (*Quercofrainetto-suberissigmetum*)	**Teucrio siculi-Quercioncerridis*	*Quercetum frainetto-suberis*
DO	41.731	Pre Apennine neutral basiphilous series of downy oak (*Rososempervirenti-Quercetum pubescent sigmetum*)	**Ostryo-Carpinionorientalis*	*Lonicero etruscae-Carpinetum orientale*
			***Lauro nobilis-Quercenionpubescentis*	*Roso sempervirenti-Quercetum pubescentis*
		Adriatic neutral basiphilous series of Turkey oak and downy oak (*Daphnolaureolae-Quercocerridissigmetum*)	**Ostryo-Carpinionorientalis*	*Peucedano cervariae-Quercetum pubescentis*
			***Laburno anagyroidis-Ostryenioncarpinifoliae*	*Daphno laureolae-Quercetum cerridis*
		Central Northern Apennine neutrobasiphilous series of downy oak (*Peucedanocervariae-Quercopubescentissigmetum*)		
		Central Apennine neutrobasiphilous series of downy oak (*Cytisosessilifolii-Quercopubescentissigmetum*)	**Ostryo-Carpinionorientalis*	*Cytisosessilifolii-Quercetumpubescentis*
			***Cytisosessilifolii -Quercenionpubescentis*	*Chamaecytisohirsuti-Quercetumpubescentis*
TO	41.7511 41.2A	Pre Apennine central southern sub acidophilous series of Hungarian oak (*Echinoposiculi-Quercofrainettosigmetum*)	**Teucrio siculi-Quercioncerridis*	*Echinoposiculi-Quercetumfrainetto*
		Pre ApennineCentralTyrrhenian sub acidophilous series of Turkey oak (*Coronilloemeri-Quercocerridissigmetum*)	**Teucriosiculi-Quercioncerridis*	*Coronilloemeri-Quercetumcerridis Cephalantherolongifoliae-Quercetum cerridis*
		Pre ApennineCentralTyrrhenianacidophilous series of Turkey oak (*Cephalantherolongifoliae-Quercocerridissigmetum*)		

Appendix 3 - Correspondences among HFCs, vegetation classes (at national level, *sensu* Blasi 2010), and CORINE biotopes (*sensu* Amadei et al. 2003)

HFCs	CORINE BIOTOPES	Geo-synphytosociology Classification	Phytosociological Syntaxonomic System	
		Sigmeta	**Order^{+} Alliance** and suballiance*****	**Association**
		Central Apennine sub-acidophilous series of Turkey oak(*Listeroovatae-Quercocerridissigmetum*)	**Erythroniodentis-canis-Carpinionbetuli*	*Cytiso villosi-Quercetumcerridis*
			***Pulmonarioapenninae-Carpinenionbetuli*	*Aremonioagrimonioidis-Quercetumcerridis*
		Central Southern Apennine siliciphilous series of Turkey oak (*Aremonioagrimonoidis-Quercocerridissigmetum*)		*Listeroovatae-Quercetumcerridis*
		Central Apennine neutrobasiphilous series of Turkey oak and hop hornbeam (*Laburnoanagyroidis-Ostryenioncarpinifoliae*)	**Ostryo-Carpinionpubescentis*	*Aceri obtusati-Quercetumcerridis*
			***Laburnoanagyroidis-Ostryenioncarpinifoliae*	
		Umbrian-Marches Apennine neutrophilous series of Turkey oak (*Aceriobtusati-Quercocerridissigmetum*)		
		Umbrian-Marches Apennine acidophilous series of Turkey oak (*Caricisylvaticae-Quercocerridissigmetum*)	**Erythroniodentis-canis-Carpinionbetuli*	*Carici sylvaticae-Quercetumcerridis*
			***Asparagotenuifolii-Carpinenionbetuli*	
		Pre Apennine central-northern neutrobasiphilous series of Turkey oak(*Loniceroxylostei-Quercocerridissigmetum*)	**Ostryo-Carpinionpubescentis*	*Loniceroxylostei-Quercetumcerridis*
			***Lauro nobilis-Quercenionpubescentis*	
SO	41.76	Central Apennine Geosigmeto of inter mountain valleys (*Pulmonarioapenninae-Carpinenionbetuli*, *Teucriosiculi-Quercioncerridis, Salicioneleagni, Salicioncinerae, Alnionincanae*)	**Erythroniodentis-canis-Carpinionbetuli*	*Centaureomontanae-Carpinetumbetuli*
			***Pulmonarioapenninae-Carpinenionbetuli*	
LO	41.2A	Central-southern Apennine sub acidophilous series of sessile oak and hornbeam (*Pulmonarioapenninae-Carpinenionbetuli*)	**Erythroniodentis-canis-Carpinionbetuli*	*Geranio nodosi-Carpinetumbetuli*
			***Pulmonarioapenninae-Carpinenionbetuli*	*Rubio-Carpinetum*
		Central Apennine Geosigmeto of inter mountain valleys (*Pulmonarioapenninae-Carpinenionbetuli*, *Teucriosiculi-Quercioncerridis, Salicioneleagni, Salicioncinerae, Alnionincanae*)		*Carpino betuli-Coryletumavellanae*
				Arisaroproboscidei-Quercetumroboris
				Malo florentinae-Quercetumroboris
RF	44.141	Peninsular hygrophilous geosigmetum[1] of riparian vegetation	**Populionalbae*	*Populetumalbae*
	44.13		**Salicionalbae*	*Salicetumalbae*
	44.3			*Salicetumtriandrae*
			**Alnionincanae*	*Aroitalici-Alnetumglutinosae*
			**Fraxinionangustifoliae*	*Fraxino-Quercetumroboris*

Appendix 3 - Correspondences among HFCs, vegetation classes (at national level, *sensu* Blasi 2010), and CORINE biotopes (*sensu* Amadei et al. 2003)

HFCs	CORINE BIOTOPES	Geo-synphytosociology Classification	Phytosociological Syntaxonomic System	
		Sigmeta	**Order^{+} Alliance** and suballiance*****	**Association**
HH	41.81	Central Apennine Tyrrhenian neutral basiphilous series of hophornbeam (*Melittiomelissophylli-Ostryocarpinifoliaesigmetum*) Pre Apennine Central Adriatic neutrobasiphilous series of hop hornbeam (*Scutellariocolumnae-Ostryocarpinifoliaesigmetum*)	**Ostryo-Carpinionpubescentis* ***Laburnoanagyroidis-Ostryenioncarpinifoliae*	*Melittiomelissophylli-Ostryetumcarpinifoliae* *Scutellariocolumnae-Ostryetumcarpinifoliae* *Hieraciomurori-Ostryetumcarpinifoliae*
		Pre Apennine central Adriatic neutrobasiphilous series of hop-hornbeam (*Asparagoacutifolii-Ostryetumcarpinifoliaesigmetum*)	**Ostryo-Carpinionpubescentis* ***Lauro nobilis-Quercenionpubescentis*	*Asparago acutifolii-Ostryetumcarpinifoliae*
CF	41.9	These communities are related to other vegetation series, because they represent catenal stages of a particular potential vegetation. Some of them can even represent stages of substitution of potential vegetation, because of environmental patterns or anthropogenic causes.	**Ostryo-Carpinionpubescentis* ***Laburnoanagyroidis-Ostryenioncarpinifoliae*	*Cardaminokitaibelii-Castaneetumsativae* *Cyclaminohederefolii-Castanetumsativae*
			**Erythroniodentis-canis-Carpinionbetuli* ***Pulmonarioapenninae-Carpinenionbetuli*	*Melampyroitalicae-Castaneetumsativae*
			**Geranio versicoloris-Fagionsylvaticae*	Communities dominatedby*Castanea sativa* and other mesophilous broadleaves
OBL	41.4			For “Invasive broadleaved woodlands” it is impossible to identify a unique syntaxonomical category, because of the presence of many other species describing different shrubby and grassland communities from phytosociological point of view.
		These communities are related to other vegetation series, because they represent: ● accessories series that can’t be mapped, because their size; ● stages of substitution of potential vegetation, because of environmental patterns or anthropogenic causes.	**Tilio platyphylli-Acerion pseudoplatani*	*Aceretumobtusati-pseudoplatani*
			**Alno-Ulmion*	*Symphyto bulbosi-Ulmetumminoris*
			**Corylo-Populiontremulae*	Communities dominated by*Populustremula*
			**Tamaricionafricanae*	Communities dominated by*Tamarixafricana*
SNC	42.15	These communities are related to other vegetation series, because they represent: ● accessories series that can’t be mapped, because their size;	**Geranio versicoloris-Fagionsylvaticae* ***Doronico orientalis-Fagenionsylvaticae*	*Pulmonarioapenninae-Abietetumalbae*
			**Aremonio-Fagionsylvaticae* ***Cardaminokitaibelii-Fagenionsylvaticae*	*Cirsioerisithalis-Abietetumalbae*

Appendix 3 - Correspondences among HFCs, vegetation classes (at national level, *sensu* Blasi 2010), and CORINE biotopes (*sensu* Amadei et al. 2003)

HFCs	CORINE BIOTOPES	Geo-synphytosociology Classification	Phytosociological Syntaxonomic System	
		Sigmeta	**Order^{+} Alliance** and suballiance*****	**Association**
		● stages of substitution of potential vegetation, because of environmental patterns or anthropogenic causes.		For "Mediterranean coniferous forests" it is impossible to identify a unique syntaxonomical category, because of the presence of many other species describing different shrubby and grassland communities from phytosociological point of view.
BF	*41.18*	These communities are related to other vegetation series, because they represent: ● accessories series that can't be mapped, because their size; ● stages of substitution of potential vegetation, because of environmental patterns or anthropogenic causes.	**Geranio versicoloris-Fagionsylvaticae* ***Doronico orientalis-Fagenionsylvaticae*	*Luzulosiculae-Fagetumsylvaticae* *Potentillomicranthae-Fagetumsylvaticae*
		Southern Apennine neutral basiphilous series of beech (*Anemonoapenninae-Fagosylvaticaesigmetum*)	**Geranio versicoloris-Fagionsylvaticae* ***Lamio flexuosi-Fagenionsylvaticae*	*Anemonoapenninae-Fagetumsylvaticae* *Anemonoapenninae-Fagetumsylvaticaeabietetosumalbae*
		Central Apennine neutral basiphilous series of beech (*Lathyroveneti-Fagosykvaticaesigmetum*)	**Geranio versicoloris-Fagionsylvaticae*	*Hieracio racemosi-Fagetumsylvaticae* *Lathyro veneti-Fagetumsylvaticae*
		Central Apennine acidophilous series of beech (*Solidaginivirgaureae-Fagosylvaticaesigmetum*) Umbrian Marches Apennine subacidophilous series of beech (*Dactylorhizofuchsii-Fagosylvaticaesigmetum*) Northern Apennine eutrophic sub acidophilous series of beech (*Cardaminoheptaphyllae-Fagosylvaticaesigmetum*) Central Apennine neutral basiphilous series of beech (*Cardaminokitaibelii-Fagosylvaticaesigmetum*)	**Aremonio-Fagionsylvaticae* ***Cardaminokitaibelii-Fagenionsylvaticae*	*Solidaginivirgaureae-Fagetumsylvaticae* *Dactylorhizofuchsii-Fagetumsylvaticae*(=*Carici sylvaticae-Fagetum*) *Cardaminoheptaphyllae-Fagetumsylvaticae* *Actaeospicatae-Fagetumsylvaticae* *Cardaminokitaibelii - Fagetumsylvaticae*
NSP	83.322 83.324			For "Eucalyptus plantations" and "False-acacia and ailanthus forest" it is impossible to identify a unique syntaxonomical category, because of the presence of many other species describing different shrubby and grassland communities from phytosociological point of view.

Appendix 3 - Correspondences among HFCs, vegetation classes (at national level, *sensu* Blasi 2010), and CORINE biotopes (*sensu* Amadei et al. 2003)

HFCs	CORINE BIOTOPES	Geo-synphytosociology Classification	Phytosociological Syntaxonomic System	
		Sigmeta	**Order[+] Alliance** and suballiance*****	**Association**
HSL	32.13 32.3	Peninsular Psammophilous and halophilousgeosigmetum of dunal vegetation system	[+]*Pistaciolentisci-Rhamnetalia alaterni*	*Pistacio-Juniperetummacrocarpae*
		These communities represent serial stages of a particular potential vegetation.	**Cisto-Ericionmanipuliflorae*	Communities dominated by*Cistus sp.pl.*
MSL	31.81 31.88 31.43	These communities represent serial stages of a particular potential vegetation..	**Pruno-Rubionulmifolii*	Communities dominated by*Rubus sp.pl., Prunusspinosa and Crataegusmonogyna.*
			**Cytisionsessilifolii*	*Spartiojuncei-Cytisetumsessilifolii*
			**Cytisionsessilifolii*	*Spartiojuncei-CytisetumsessilifoliivarJuniperuscommunis*
			**Cytisionsessilifolii*	*Junipero -Pyracanthetumcoccinae*
		Central – Southern Apennine neutral basophilous series of dwarf juniper (*Daphnooleoidis_Juniperion*)	**Daphnooleoidis-Juniperionalpinae*	*Daphnooleoidis-Juniperetumalpinae*
HMSL	31.43 31.54			*Helianthemograndiflori-Juniperetumalpinae*
		Central Apennine Neutral basophilous series of mugo pine shrub (*Epipactidoatropurpurae-Pinion mugo*)	**Epipactidoatropurpurae-Pinion mugo*	*Polygalochamaebuxus-Pinetummugo*
				Orthiliosecundae-Pinetummugo

[1] Geosigmetum is recognized in relation to geomorphological and climatic features, and it is formed of a set of sigmeta. A geosigmetum is thus an ecologically heterogeneous unit, because it is formed by several sigmeta, each of which has its own ecology and thus a particolar type of potential vegetation.