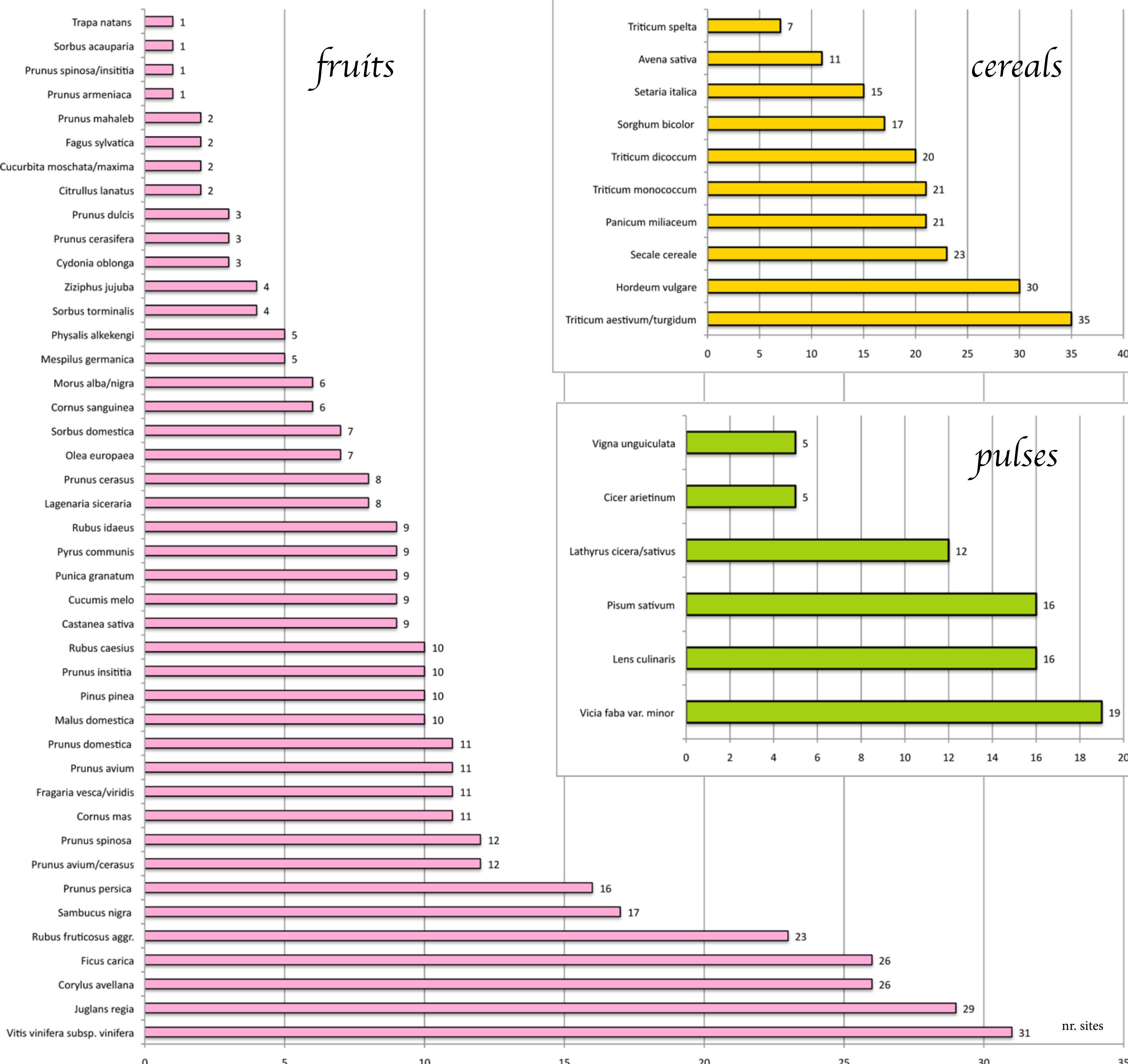


# Archaeobotanical evidences of food plants in Northern Italy during the Medieval and Renaissance Periods

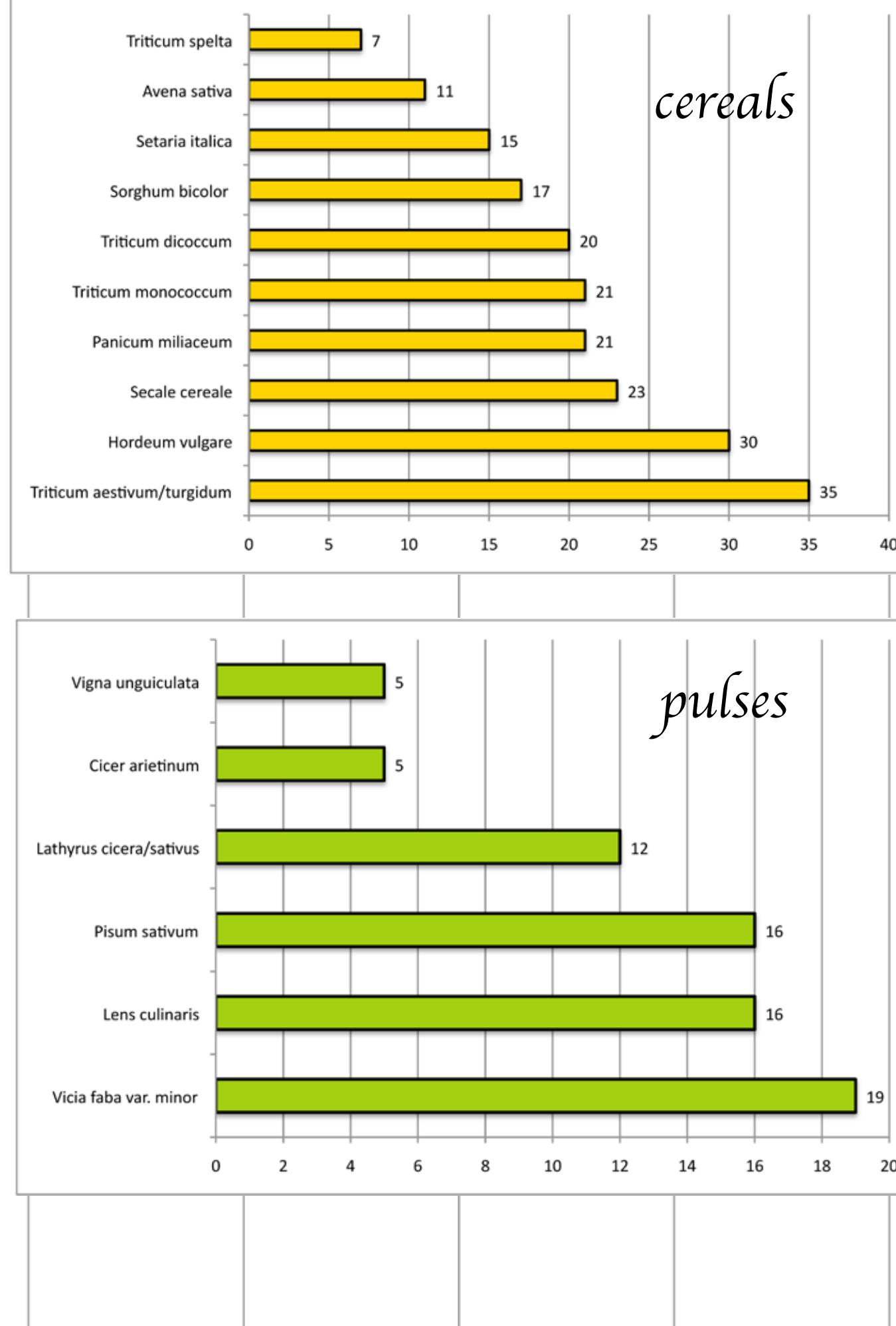


Materials from archaeological excavations: dishes from a convent (Ferrara -via Scandiana), playing dice in ivory and coral necklace (gifts at banquets of the Este: Ferrara - Piazza Municipale), fragment of serving dish (Imola - Piazza Matteotti) (photos: Soprintendenza Beni Archeologici Emilia-Romagna)

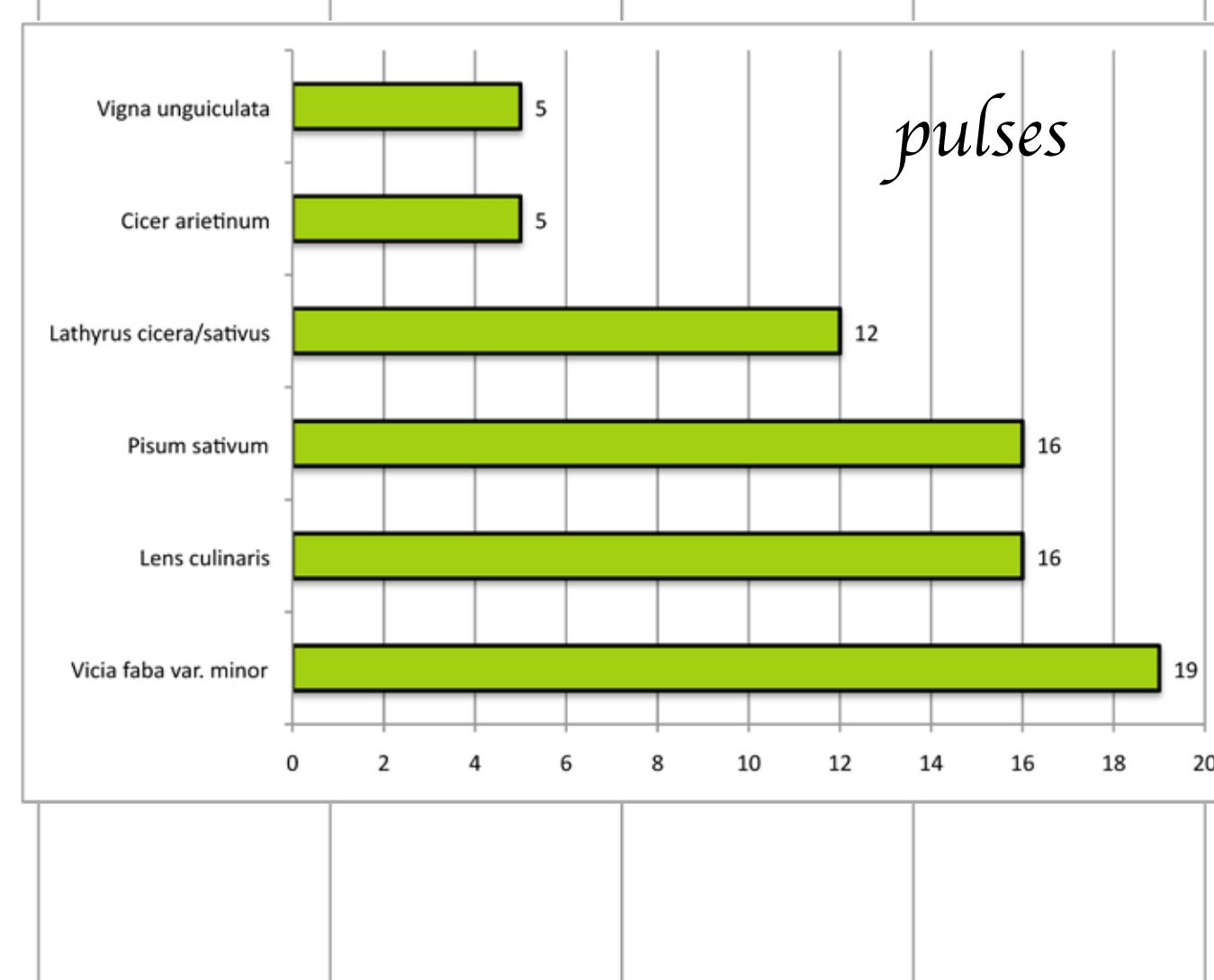
fruits



cereals



pulses



1 - *Castanea sativa* (seed - 20 mm); 2 - *Prunus domestica* (endocarp - 19.8 mm); 3 - *Vitis vinifera* subsp. *vinifera* (pip - 6 mm); 4 - *Fragaria vesca* (achene - 1.4 mm); 5 - *Triticum aestivum/durum* (caryopsis - 5.3 mm) (photos: G. Bosi, R. Rinaldi)



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6 - Food plants from the "Duchesse's Garden" in Ferrara (drawings: Riccardo Merlo)

For a better interpretation of these data, written sources, such as the most ancient Italian "cookbooks", have been checked for food plants. Such texts dated to a period between the 14th and the 17th century AD, and include "Liber de coquina" (various anonymous authors), "Libro de arte coquinaria" (the first collection of recipes "signed" - Maestro Martino - MM in the table at right), "De honesta voluptate et valetudine" (Platina), "Libro novo nel quale s'insegna a far d'ogni sorte di vivande" (Cristoforo da Messisbugo - CM in the table at right), "Opera. Dell'arte di cucinare" (Scappi),...

The aim of this study is to highlight carpological remains of food plants that have been found in forty archaeological sites of the Medieval and Renaissance Periods (7th - 16th cent. AD). All sites are located in Northern Italy. The deposits belonged to different contexts, especially waste disposal.

site	province	region	chronology (century AD)	context
S. Agata Bolognese - Nuova Geovis	Bologna		7 <sup>th</sup> -12 <sup>th</sup>	rural settlement
Imola - Piazza Matteotti			15 <sup>th</sup>	urban settlement and graves
Ferrara - Corso Porta Reno/via Vaspagello			10 <sup>th</sup> -15 <sup>th</sup>	urban settlement
Ferrara - Piazza Castello			13 <sup>th</sup> -15 <sup>th</sup>	urban settlement
Ferrara - Piazza Municipale			15 <sup>th</sup>	convent
Ferrara - via Scandiana/S. Rocco			15 <sup>th</sup> -17 <sup>th</sup>	Ducal Palace
Argenta - via Vinardola/via Aletti			16 <sup>th</sup> -17 <sup>th</sup>	convent
Forlì - ex Monte di Pietà	Forlì - Cesena		13 <sup>th</sup> -15 <sup>th</sup>	urban settlement
Modena - via Castellarolo	Modena		9 <sup>th</sup> -11 <sup>th</sup>	urban settlement
Modena - Palazzo Solmi			10 <sup>th</sup> -13 <sup>th</sup>	urban settlement
Modena - Largo S. Francesco			10 <sup>th</sup> -13 <sup>th</sup>	urban walls
Modena - area ex Novi Sad			11 <sup>th</sup> -12 <sup>th</sup>	woodland
Modena - Vescovado			12 <sup>th</sup> -13 <sup>th</sup>	Bishop Palace
Modena - via Rismondo			16 <sup>th</sup> -17 <sup>th</sup>	urban settlement
Parma - Piazza Garibaldi	Parma		9 <sup>th</sup> -11 <sup>th</sup>	urban market area
Faenza - via Micheline			15 <sup>th</sup>	convent?
Lugo - Piazza Baracca	Ravenna		15 <sup>th</sup> -16 <sup>th</sup>	urban productive area
Povento - Castello della Motta	Udine		12 <sup>th</sup>	castle
Udine - Casa della Confraternita			14 <sup>th</sup>	castle
Luni - Ortonovo	La Spezia		8 <sup>th</sup>	urban settlement
Sarzana - S. Andrea			11 <sup>th</sup>	productive area
Chiari - Piazza Zanardelli	Brescia		from high Medieval Age to 10 <sup>th</sup>	urban settlement
Brescia - via Alberto Mario			12 <sup>th</sup> -13 <sup>th</sup>	urban settlement
Brescia - Capitolium	Cremona		high Medieval Age	urban settlement
Volta Mantovana - Palazzo Guerrieri Gonzaga	Mantova		14 <sup>th</sup> -15 <sup>th</sup>	palace
S. Bartolomeo de Castelaz	Sondrio		9 <sup>th</sup> -10 <sup>th</sup>	rural settlement
Sondrio - via Quadrio			11 <sup>th</sup> -14 <sup>th</sup>	rural settlement
Castelletto Cervo - Priorato Cluniacense SS. Pietro e Paolo	Biella		from high Medieval Age to 15 <sup>th</sup>	convent
Cherasco - Castello di Manzano	Cuneo		11 <sup>th</sup> -12 <sup>th</sup>	castle
Alba - via Vernazza			high Medieval Age	urban settlement
Collengo	Torino		6 <sup>th</sup> -J <sup>th</sup>	rural settlement
Castello di Moncalieri			13 <sup>th</sup> -15 <sup>th</sup>	castle
S. Candido - Casa dell'Organista	Bolzano		10 <sup>th</sup> -12 <sup>th</sup>	rural settlement
S. Candido - Cantiere Municipio			high Medieval Age	rural settlement
Loppio - Isola S. Andrea	Trento		6 <sup>th</sup> -7 <sup>th</sup>	fortified settlement
Nago - complesso rustico	Treviso		6 <sup>th</sup> -7 <sup>th</sup>	rural settlement
Vittorio Veneto - località S. Rocco			12 <sup>th</sup> -15 <sup>th</sup>	rural settlement
Nogara - località Molino di Sotto	Verona		9 <sup>th</sup> -11 <sup>th</sup>	rural settlement

taxa	CM % frequency (on 323 recipes)	MM % frequency (on 356 recipes)	archaeobotanical records (seeds/fruits)	
			seeds	fruits
Aframomum melegueta	0,3	1,1	grains of paradise	
Allium ameloprasum	0,3		leek	
Allium cepa	6,2	5,9	onion	
Allium sativum	X		shallot	
Anchusa sp.pl.			garlic	yes
Arbutus unedo			buglos	
Armoracia rusticana			strawberry tree	
Artemisia dracunculus	0,3		horseradish	
Asparagus officinalis	0,6		tarragon	
Beta vulgaris	2,5	2,8	asparagus	
Borago officinalis	0,3	0,6	beet	yes
Brassica nigra/Sinapis alba/B. juncea	0,6	0,8	borage	yes
Brassica oleracea	X		broccoli	
Brassica rapa	0,8		cauliflower	
Campanula rapunculus	1,2	1,4	cabbage (white/red)	yes
Cannabis sativa	0,6	0,3	savoy cabbage	
Capsicum annuum	1,9		turnip	
Castanea sativa	1,9		rampion	
Ceratonia siliqua	0,3		hemp	
Cicer arietinum	0,3	0,8	caper bush	yes
Chichorium intybus	0,3		chestnut	
Cinnamomum verum	53,3	24,4	carob	yes
Cinnamomum camphora	0,9	0,8	chickpea	
Citrus medica	9,9	6,5	cinnamon	
Citrus aurantium	2,8	2,2	campion	
Citrus limon	0,6		citron	
Coriandrum sativum	1,5	0,3	coriander	yes
Cornus mas	0,3	0,8	cornelian cherry	
Cornus masella	1,2	0,3	hazelnut	
Crotonellus	X		hawthorn	
Crotonellus	1,2	0,3	saffron	
Cucumis melo	42,4	26,7	melon	
Cucumis sativus	1,9	0,3	cucumber	
Cuminum cyminum	0,3		cumin	
Cydonia oblonga	0,6	0,8	quince	yes
Cynara cardunculus	0,9	0,3	caroon	
Cynara scolymus	0,9	0,3	globe artichoke	
Daucus carota	0,9	0,6	carrot	yes
Dipsacus/Eruca sativa	X		rocket	
Ficus carica	2,2	2,8	fig	yes
Foeniculum vulgare	8,1	3,7	fennel	
Fragaria vesca/viridis	X		strawberry	
Hedera helix	0,6	0,3	barley	yes
Hordeum vulgare	0,6	0,3	hop	
Humulus lupulus	3,1	1,4	walnut	
Juglans regia	1,2	0,3	juniper	
Juniperus commun				