

Balducci, E., Tini, F., Roehrig, L., Beccari, G., Onofri, A., Montanari, M., Alberti, I., Prodi, A., Havis, N. D., Benincasa, P. & Covarelli, L. (2025). Survey for *Pyrenophora teres* and *Ramularia collo-cygni* in barley grain from Italy. *Phytopathologia Mediterranea* 64(2): 255–269 doi: 10.36253/phyto-15988

SUPPLEMENTARY MATERIAL

Table S1. List of barley samples from the 2019/2020 growing season.

Macro-areas	Region	Province	Location	Variety	Use	Sample code
North	Veneto	Verona	Isola Rizza	RGT Planet	Malt	1
		Venice	Eraclea	Laureate	Malt	2
		Verona	Casaleone	RGT Planet	Malt	3
		Padua	Torreglia	RGT Planet	Malt	4
		Rovigo	Arquà Polesine	RGT Planet	Malt	5
		Rovigo	Arquà Polesine	Meseta	Feed	6
		Verona	Angiari	Concerto	Malt	7
	Emilia-Romagna	Bologna	San Pietro in Casale	Sandra	Feed	8
		Ferrara	Argenta	Sandra	Feed	9
		Reggio Emilia	Sant’Ilario D’Enza	RGT Planet	Malt	10
		Ravenna	Fusignano	Concerto	Malt	11
		Parma	Busseto	RGT Planet	Malt	12
		Parma	Busseto	RGT Planet	Malt	13
		Parma	Parma	RGT Planet	Malt	14
		Ferrara	Mesola	Sandra	Feed	15
		Reggio Emilia	Poviglio	Lutece	Feed	16
		Reggio Emilia	Poviglio	Lutece	Feed	17
		Ravenna	Ravenna	Sandra	Feed	18
		Bologna	Malbergo	Sandra	Feed	19
		Bologna	Argelato	Sandra	Feed	20
		Bologna	Granarolo Dell’Emilia	Rondo	Feed	21
		Ferrara	Bondeno	Rondo	Feed	22
		Ferrara	Mesola	Sandra	Feed	23
	Lombardy	Ferrara	Poggio Renatico	Cometa	Feed	24
		Mantua	Sabbioneta	Concerto	Malt	25
		Mantua	Castel D’Ario	Meseta	Feed	26
Centre	Tuscany	Grosseto	Roccalbegna	Lutece	Feed	27
		Pisa	Santa Luce	Lutece	Feed	28
		Grosseto	Grosseto	Aldebaran	Feed	29
		Siena	Monteroni D’arbia	Aldebaran	Feed	30
		Livorno	Castiglioncello	Lutece	Feed	31
		Ancona	Osimo	Digersano_Bio	Feed	32
	Marche	Macerata	Mogliano	Digersano_Bio	Feed	33
		Macerata	Caldarola	Digersano_Bio	Feed	34
		Ancona	Serra De’ Conti	Concerto	Malt	35
		Macerata	Tolentino	Azzurro	Feed	36
		Perugia	Umbertide	Sandra	Feed	37
	Umbria	Perugia	Marsciano	Sandra	Feed	38
		Perugia	Todi	Sandra	Feed	39
		Perugia	Bastia Umbra	Sandra	Feed	40
		Perugia	Marsciano	Quench	Malt	41
		Perugia	Perugia	Quench	Malt	42
		Perugia	Panicale	Quench	Malt	43

Table S2. List of barley samples from the 2020/2021 growing season

Macro-areas	Region	Province	Location	Variety	Use	Sample Code
North	Emilia-Romagna	Ferrara	Argenta	Ketos	Feed	1.2
		Bologna	Granarolo Dell'Emilia	Ketra Vso	Feed	2.2
		Ravenna	Alfonsine	Ketos	Feed	3.2
		Ravenna	Ravenna	Atlante	Feed	4.2
		Ravenna	Cervia	Atlante	Feed	5.2
		Ferrara	Fusignano	Concerto	Malt	6.2
		Ferrara	Casumaro	Atlante	Feed	7.2
		Bologna	San Giovanni In Persiceto	Zerbo	Feed	8.2
		Ferrara	Fiscaglia	Pariglia	Feed	9.2
		Bologna	Castenaso	Nure	Feed	10.2
		Ferrara	Codigoro	Campagne	Feed	11.2
		Bologna	Bologna	Zerbo	Feed	12.2
		Bologna	Castel San Pietro	Zerbo	Feed	13.2
		Bologna	Pieve di Cento	Sandra	Feed	14.2
		Bologna	Minerbio	Sandra	Feed	15.2
		Modena	San Felice Sul Panaro	Sandra	Feed	16.2
	Veneto	Rovigo	Porto Tolle	Ketos	Feed	17.2
		Venice	Musile Di Piave	Rgt Planet	Malt	18.2
		Venice	Torre Di Mosto	Rgt Planet	Malt	19.2
		Verona	Gazzo Veronese	Sirio	Feed	20.2
Centre	Friuli Venezia Giulia	Udine	Castions di Strada	Bente	Malt	21.2
	Umbria	Perugia	Passignano Sul Trasimeno	Ketos	Feed	22.2
		Perugia	Marsciano	Callas	Feed	23.2
		Perugia	Marsciano	Azzurro	Feed	24.2
		Perugia	Marsciano	Lg Capricorn	Feed	25.2
		Perugia	Marsciano	Multie	Feed	26.2
		Perugia	Piegara	Sandra	Feed	27.2
		Perugia	Assisi	Lg Capricorn	Feed	28.2
		Perugia	Perugia	Quench	Malt	29.2
		Perugia	Corciano	Lg Zebra	Feed	30.2
		Perugia	Piegara	Atomo	Feed	31.2
		Perugia	Corciano	Atomo	Feed	32.2
		Perugia	Perugia	Ketos	Feed	33.2
		Perugia	Marsciano	Alimini	Feed	34.2
		Perugia	Magione	Ketos	Feed	35.2
		Perugia	Montefalco	Atomo	Feed	36.2
		Perugia	Marsciano	Ketos	Feed	37.2
		Perugia	Marsciano	Quench	Malt	38.2
		Perugia	Spello	Ketos	Feed	39.2
South	Tuscany	Arezzo	Poppi	Heidi	Feed	40.2
	Marche	Pesaro and Urbino	Serrungarina	Kws Joyau	Feed	41.2
	Abruzzo	Pescara	Loreto Apruntino	Sandra	Feed	42.2
		Chieti	Villa San Giovanni	Sandra	Feed	43.2
	Apulia	Foggia	Manfredonia	Fortuna	Malt	44.2
		Foggia	Trinitapoli	Fortuna	Malt	45.2
		Foggia	Lucera	Fortuna	Malt	46.2
	Enna	Enna	Dittaino	Rgt Planet	Malt	47.2
		Enna	Nicosia	Rgt Planet	Malt	48.2
		Enna	Dittaino	Concerto	Malt	49.2
		Palermo	Valledolmo	Rgt Planet	Malt	50.2
	Sicily	Catania	Libertinia	Rgt Planet	Malt	51.2
		Enna	Aidone	Rgt Planet	Malt	52.2
		Catania	Libertinia	Concerto	Malt	53.2
		Enna	Nicosia	Concerto	Malt	54.2
		Palermo	Valledolmo	Concerto	Malt	55.2
		Enna	Aidone	Concerto	Malt	56.2

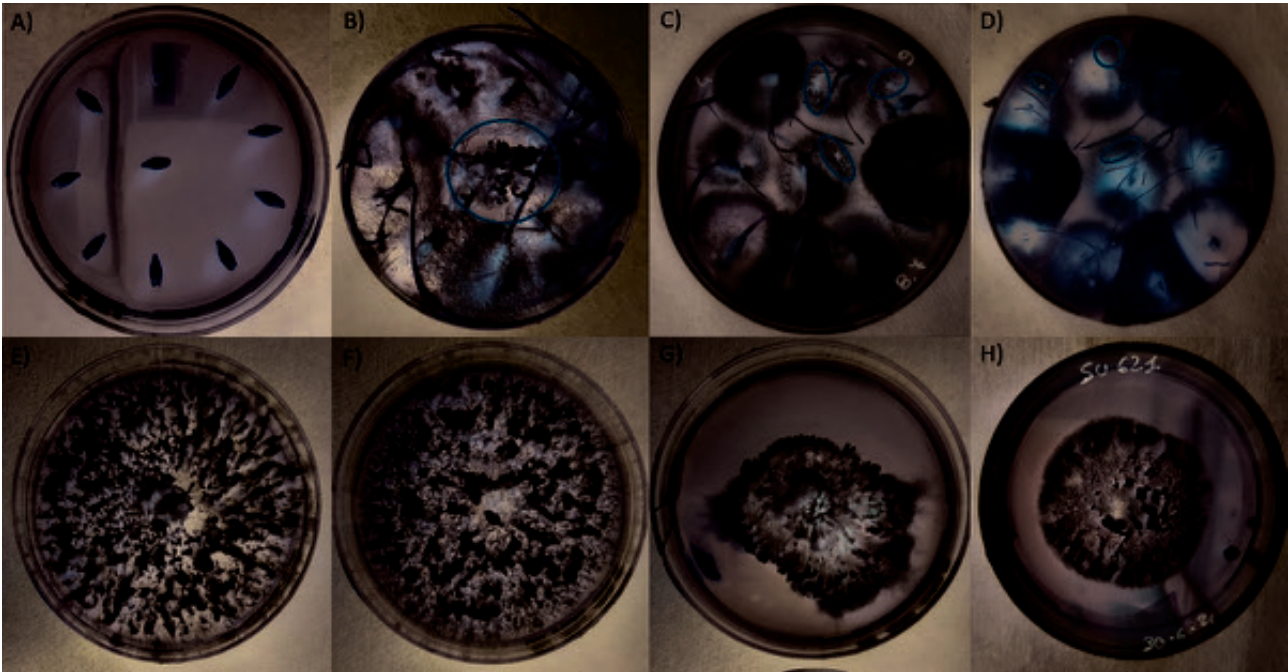


Figure S1. Example of barley kernels placed on Potato Dextrose Agar (PDA) before the development of any fungal colonies (A); examples of fungal colonies grown from barley kernels after 5 days of incubation at 22 °C in the dark, shown both from above (B, C) and below (D). Red circles highlight colonies morphologically attributable to *P. teres*. Examples of isolates obtained from barley kernels, subsequently grown in pure culture on PDA, and molecularly identified by PCR as belonging to the species *P. teres* f. *teres* (E–H).

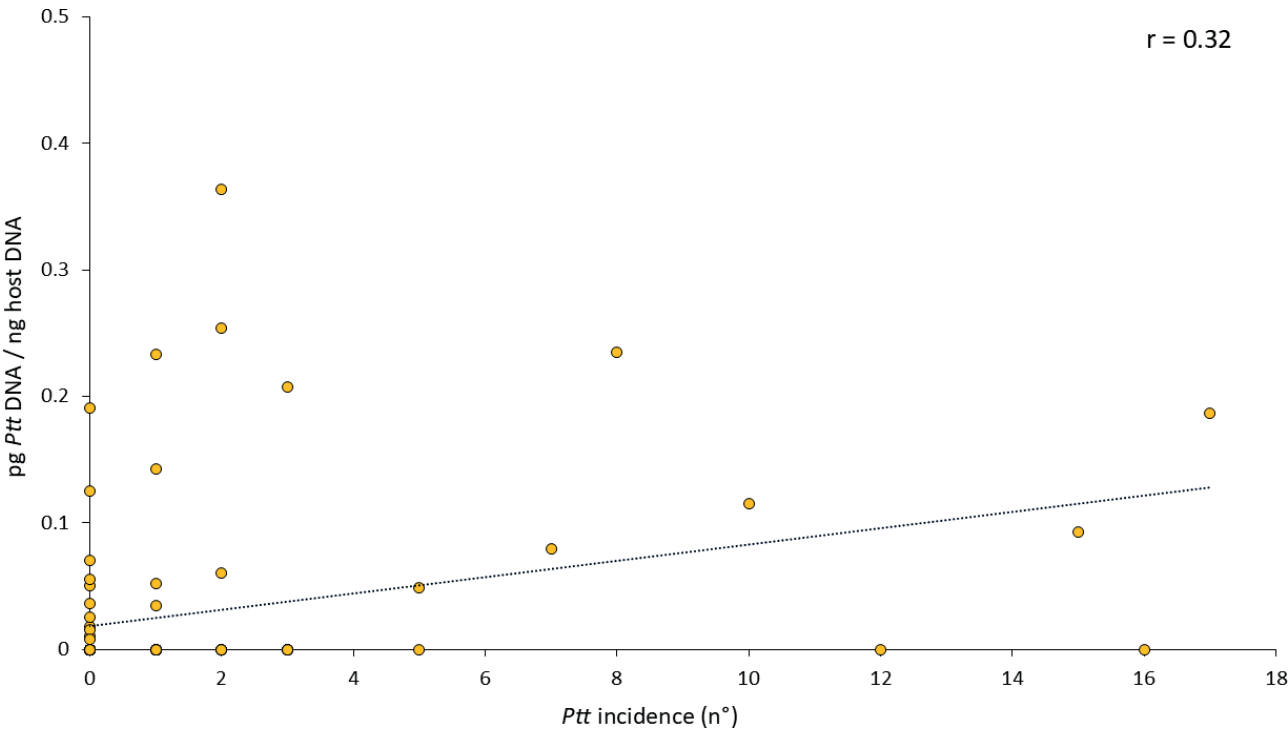


Figure S2. Correlation between the number of *P. teres* f. *teres* (*Ptt*) colonies isolated (100 kernels per sample) and the level of *Ptt* DNA quantified from the grain samples (pg *Ptt* DNA / ng host DNA) analyzed using the Pearson correlation coefficient (r).