

Guide to proof correction

(please, read carefully)

PDF annotation

To make corrections and changes clearly visible and easy to interpret, we recommend to directly annotate the PDF proofs with the appropriate tools, using **Adobe Acrobat Pro** or **Adobe Acrobat Reader** (available for Microsoft Windows, Apple MacOSX, Linux; <https://get.adobe.com/reader>).

The Annotation Tools (in Adobe Acrobat)

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1. Select the text using the dedicated tool  and then choose the appropriate annotation tool.
2. Choose the appropriate annotation tool and directly select the text you wish to comment.

 INSERT TEXT IN CORRESPONDENCE TO THE CARET	 REPLACE TEXT
Use to add new text to the existent text. Place the cursor in the precise spot you want to add the text and write the new text in the comment box. If the new text contains different formats, expressly indicate this in the comment box (<italics>, <bold>, etc.). If you only require the insertion of one space, indicate <space> in the comment box.	Use to replace existent text with new text. With the cursor select the text that you wish to replace and write the new text in the comment box. If the new text contains different formats, expressly indicate this in the comment box (<italics>, <bold>, etc.). If you only require the insertion of one space, indicate <space> in the comment box.
 DELETE TEXT	 UNDERLINE TEXT
Use to show text to delete. With the cursor select the text that you wish to delete. If you double click on the deleted text, you can write a comment.	Use to indicate text to format in italics. With the cursor select the text that you wish to underline. If you double click on the scored text, you can write a comment to indicate other formats: <bold>, <not italics>.
 HIGHLIGHT / ADD A COMMENT	 DRAWING TOOLS
Use to highlight text and if necessary to add a comment. Use to make notes that are not corrections of the text. If you double click on the highlighted text, you can write a comment.	ONLY use the drawing tools to mark where to move parts of text, tables, figures, etc.

IMPORTANT!

- > **DO NOT attempt to edit the pdf file text itself.**
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- If you need to insert or replace text in more than one place within a line or a paragraph of text, it is more efficient to replace the entire line of text using the tool  Replace text.
- You **DO NOT** need to use the  Highlighting tool,  Add a sticky note or other drawing tools to further highlight the annotated text. Annotations can be viewed in a separate window, which makes them easy to identify.

 correct

PRACTICAL KNOWLEDGE

Mimesis ~~bresentz~~ itself to us as the foundation of processes of socialisation, civilisation and the construction of thought. It appears as a decisive instance capable of rendering an account of modes and form~~ssss~~s in which our collective life is historically realised, but also of all of those actions, practices, and symbolic-cognitive strategies through which the processes of the elaboration and intersubjective organisation of sense are always and again renewed¹. Thus **mimesis** is to be understood as an original principle capable of in some way rendering an account, in historical-anthropological terms, of the very genesis of culture, as well as of the various modes of its effective transmission, reception, and dissemination. From this point of view, mimesis can be understood as a partial exemption (Entlastung).

¹ Prompted by feelings anxiety in the face of the **reality**.

Comment



presents



No <bold>



international



PRACTICAL KNOWLEDGE

Mimesis ~~bresentz~~ itself to us as the foundation of processes of socialisation, civilisation and the construction of thought. It appears as a decisive instance capable of rendering an account of modes and forms ~~ssss~~ in which our collective life is historically realised, but also of all of those actions, practices, and symbolic-cognitive strategies through which the processes of the elaboration and intersubjective organisation of sense are always and again renewed¹. **Thus mimesis is to be** understood as an original principle ~~no bold~~ of in some way rendering an account, in historical-anthropological terms, of the very genesis of culture, as well as of the various modes of its effective transmission, reception, and dissemination. From this point of **insert "international"** an be understood as a partial exemption (Entlastung).

¹ Prompted by feelings anxiety in the face of the **reality**.

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F. Tini, G. Beccari, N. Terzaroli, E. Berna, L. Covarelli, M. Quaglia (2024). Phytosanitary problems in elephant garlic (*Allium ampeloprasum* var. *holmense*) in the “Val di Chiana” area (Central Italy), and evaluation of potential control strategies. *Phytopathologia Mediterranea* 63(1): 53–72. doi: 10.36253/phyt0-14911

Table S1. Primer sequences, products sizes and annealing temperatures used in PCR assays for the identification of *Fusarium* and *Penicillium* isolates developed from elephant garlic cloves.

Fungal genus	Locus	Primer name	Sequences (5'-3')	Product size (bp)	Annealing temperature (°C)	References
<i>Fusarium</i>	<i>tef1α</i>	EF1 (Fw)	ATGGGTAAGGA(A/G)GACAAGAC	700	53	O'Donnell <i>et al.</i> , 1998; Geiser <i>et al.</i> , 2004
		EF2 (Bw)	(GGA(G/A)GTACCACT(G/C)ATCATGTT			
<i>Penicillium</i>	<i>BenA</i>	Bt2a (Fw)	GGTAACCAAATCGGTGCTGCTTTC	550	67	Glass and Donaldson, 1995
		Bt2b (Bw)	ACCCTCAGTGACTGACCCCTGGC			
	<i>CaM</i>	CMD5 (Fw)	CCGAGTACAAGGARGCCTTC	500	55	Hong <i>et al.</i> , 2005
		CMD6 (Bw)	CCGATRGAGGTCAATACGTGG			

Table S2. *Fusarium* spp. isolates used in the phylogenetic analysis and related GenBank accession numbers.

Isolates	Species	GenBank accession numbers (<i>tef1-α</i>)	Isolates	Species	GenBank accession numbers (<i>tef1-α</i>)
Foc 1 ^a	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	GU165915	F 102	<i>Fusarium proliferatum</i>	OQ078502
Foc 4 ^a	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	GU165916	F 105	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078503
Foc 21 ^a	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	GU165932	F 107	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078504
Fox 260 ^b	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	KT239472	F 111	<i>Fusarium oxysporum</i> f. sp. <i>dianthi</i>	OQ078505
JBL 4 ^c	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	MH161447	F 119	<i>Fusarium proliferatum</i>	OQ078506
STE-U 6636	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	GU165888	F 122	<i>Fusarium proliferatum</i>	OQ078507
STE-U 6645	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	GU165897	F 125	<i>Fusarium oxysporum</i> f. sp. <i>lactucae</i>	OQ078508
STE-U 6658	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	GU165910	F 129	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078509
FOC 93_124	<i>Fusarium oxysporum</i> f. sp. <i>ciceris</i>	MW375673	F 130	<i>Fusarium oxysporum</i> f. sp. <i>dianthi</i>	OQ078510
CAV_92	<i>Fusarium oxysporum</i> f. sp. <i>cubense</i>	MT179434	F 134	<i>Fusarium proliferatum</i>	OQ078511
C4_17 ^d	<i>Fusarium oxysporum</i> f. sp. <i>dianthi</i>	GU199328	F 137	<i>Fusarium proliferatum</i>	OQ078512
Fod 001 ^e	<i>Fusarium oxysporum</i> f. sp. <i>dianthi</i>	LT841217	F 138	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078513
Fod 008 ^e	<i>Fusarium oxysporum</i> f. sp. <i>dianthi</i>	LT841231	F 140	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078514
Lapemi 13 ^f	<i>Fusarium oxysporum</i> f. sp. <i>dianthi</i>	MG189930	F 143	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078515
3_19 ^g	<i>Fusarium oxysporum</i> f. sp. <i>lactucae</i>	MK801787	F 145	<i>Fusarium oxysporum</i> f. sp. <i>dianthi</i>	OQ078516
Foa 55	<i>Fusarium oxysporum</i> f. sp. <i>lactucae</i>	MK968948	F 151	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078517
NRRL 22016 ^h	<i>Fusarium subglutinans</i>	HM057336	F 157	<i>Fusarium proliferatum</i>	OQ078518
CBS 480.96	<i>Fusarium proliferatum</i>	MN534059	F 158	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078519
NRRL 52743	<i>Fusarium proliferatum</i>	JF740819	F 160	<i>Fusarium proliferatum</i>	OQ078520
F 12	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078495	F 161	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078521
F 24	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078496	F 174	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078522
F 42	<i>Fusarium oxysporum</i> f. sp. <i>dianthi</i>	OQ078497	F 176	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078523
F 60	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078498	F 179	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078524
F 77	<i>Fusarium oxysporum</i> f. sp. <i>dianthi</i>	OQ078499	F 180	<i>Fusarium oxysporum</i> f. sp. <i>cepae</i>	OQ078525
F 82	<i>Fusarium proliferatum</i>	OQ078500	NL_96 ^h	<i>Fusarium redolens</i>	KP964872
F 88	<i>Fusarium proliferatum</i>	OQ078501			

^aisolates obtained in Colorado (USA) as reported by Southwood *et al.* (2012); ^bisolate obtained in Finland by Haapalainen *et al.* (2016); ^cisolate obtained in Serbia by Ignjatov *et al.* (2017); ^disolate obtained in Spain by Castaño *et al.* (2014); ^eisolates reported in Brankovics *et al.* (2017); ^fisolate reported in Pozzebon Venturini *et al.* (2018); ^gisolate obtained in Italy by Gilardi *et al.* (2019); ^hisolates from the Warwick Crop Centre, University of Warwick, UK; CBS: Culture collection of the Centraalbureau voor Schimmelcultures, Fungal Biodiversity Centre, Utrecht, the Netherlands; STE_U: fungal culture collection of the Department of Plant Pathology, University of Stellenbosch, South Africa; NRRL: Mycological collection of the National Regional Research Laboratory, Peoria, IL, USA; F: isolate obtained from the present study and deposited in the fungal culture collection of the Department of Agricultural, Food and Environmental Sciences, University of Perugia, Perugia, Italy; Bold type, GenBank accession number of this isolate.

Table S3. *Penicillium* spp. isolates used in the phylogenetic analysis and related GenBank accession numbers.

Isolates	Species	GenBank accession numbers	
		<i>BenA</i>	<i>CaM</i>
CBS 131.89	<i>Penicillium allii</i>	AF004158	KU896820
NRRL 2011	<i>Penicillium brevicompactum</i>	DQ645784	AY484817
NRRL 2012	<i>Penicillium brevicompactum</i>	DQ645785	AY484818
NRRL 36535	<i>Penicillium chrysogenum</i>	EF198557	EF198585
CBS 117.64	<i>Penicillium citrinum</i>	GU944542	GU944640
CBS 241.85	<i>Penicillium citrinum</i>	GU944546	GU944641
CBS 330.79	<i>Penicillium corylophylum</i>	GU944519	GU944607
CBS 419.89	<i>Penicillium flavigenum</i>	AY371607	JX996281
P 3	<i>Penicillium allii</i>	OQ078526	OQ078543
P 31	<i>Penicillium allii</i>	OQ078527	OQ078544
P 41	<i>Penicillium citrinum</i>	OQ078528	OQ078545
P 73	<i>Penicillium allii</i>	OQ078529	OQ078546
P 104	<i>Penicillium allii</i>	OQ078530	OQ078547
P 109	<i>Penicillium allii</i>	OQ078531	OQ078548
P 127	<i>Penicillium allii</i>	OQ078532	OQ078549
P 131	<i>Penicillium allii</i>	OQ078533	OQ078550
P 139	<i>Penicillium allii</i>	OQ078534	OQ078551
P 147	<i>Penicillium allii</i>	OQ078535	OQ078552
P 150	<i>Penicillium brevicompactum</i>	OQ078536	OQ078553
P 154	<i>Penicillium allii</i>	OQ078537	OQ078554
P 162	<i>Penicillium allii</i>	OQ078539	OQ078556
P 164	<i>Penicillium allii</i>	OQ078540	OQ078557
P 167	<i>Penicillium allii</i>	OQ078541	OQ078558
P 168	<i>Penicillium brevicompactum</i>	OQ078542	OQ078559
CBS 310.38	<i>Talaromyces flavus</i>	JX494302	KF41949

CBS: Culture collection of the Centraalbureau voor Schimmelcultures, Fungal Biodiversity Centre, Utrecht, the Netherlands; NRRL: Mycological collection of the National Regional Research Laboratory, Peoria, IL, USA; P: isolate obtained from the present study and deposited in the fungal culture collection of the Department of Agricultural, Food and Environmental Sciences, University of Perugia, Perugia, Italy; Bold type, GenBank accession number of this isolate. Bold type, GenBank accession number of this isolate.

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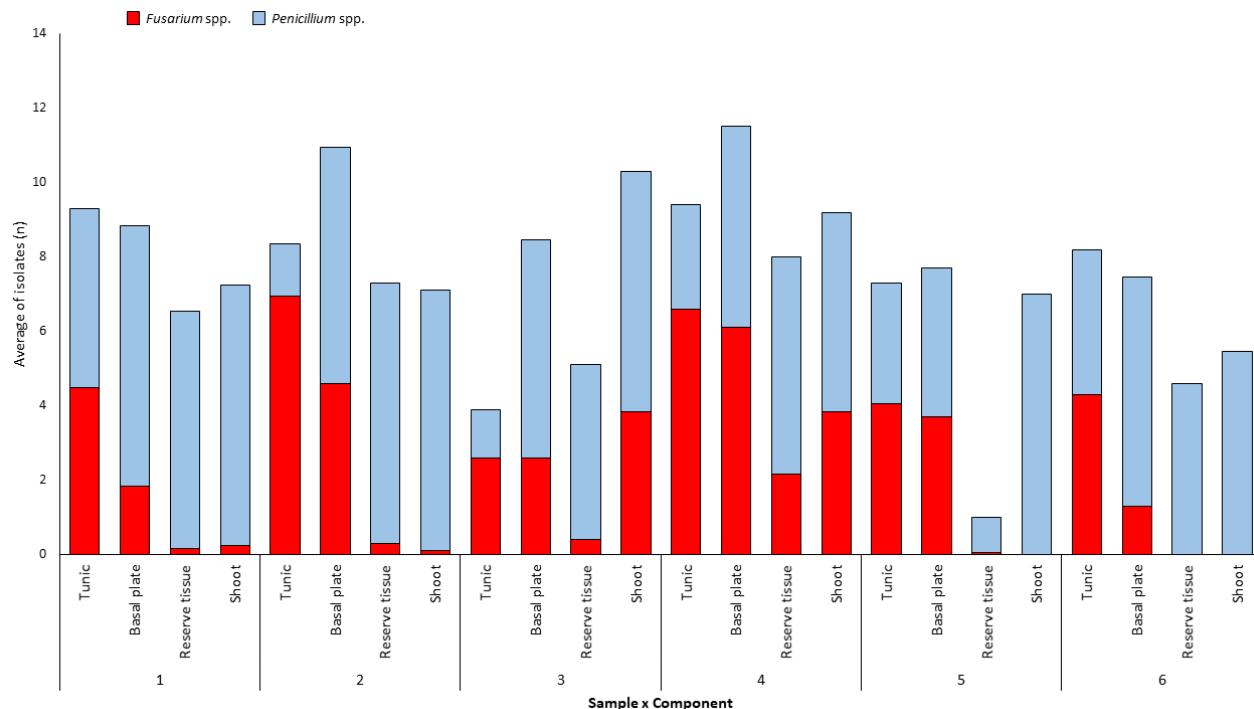


Figure S1. *Fusarium* spp. and *Penicillium* spp. isolated from the four different components (tunic, basal plate, reserve tissue and shoot) of elephant garlic cloves of each of the six samples analyzed. Columns represent the average of the number of isolates on potato dextrose agar from the four different selected components of 20 cloves per sample.

antibacterial and antifungal combinations have better activity against clinically relevant fusarium species? in vitro synergism. *International Journal of Antimicrobial Agents* 51: 784–788. <https://doi.org/10.1016/j.ijantimicag.2017.10.017>

Southwood M.J., Viljoen A., Mostert L., Rose L.J., McLeod A., 2012. Phylogenetic and biological characterization of *Fusarium oxysporum* isolates associated with onion in South Africa. *Plant Disease* 96: 1250–1261. <https://doi.org/10.1094/PDIS-10-11-0820-RE>

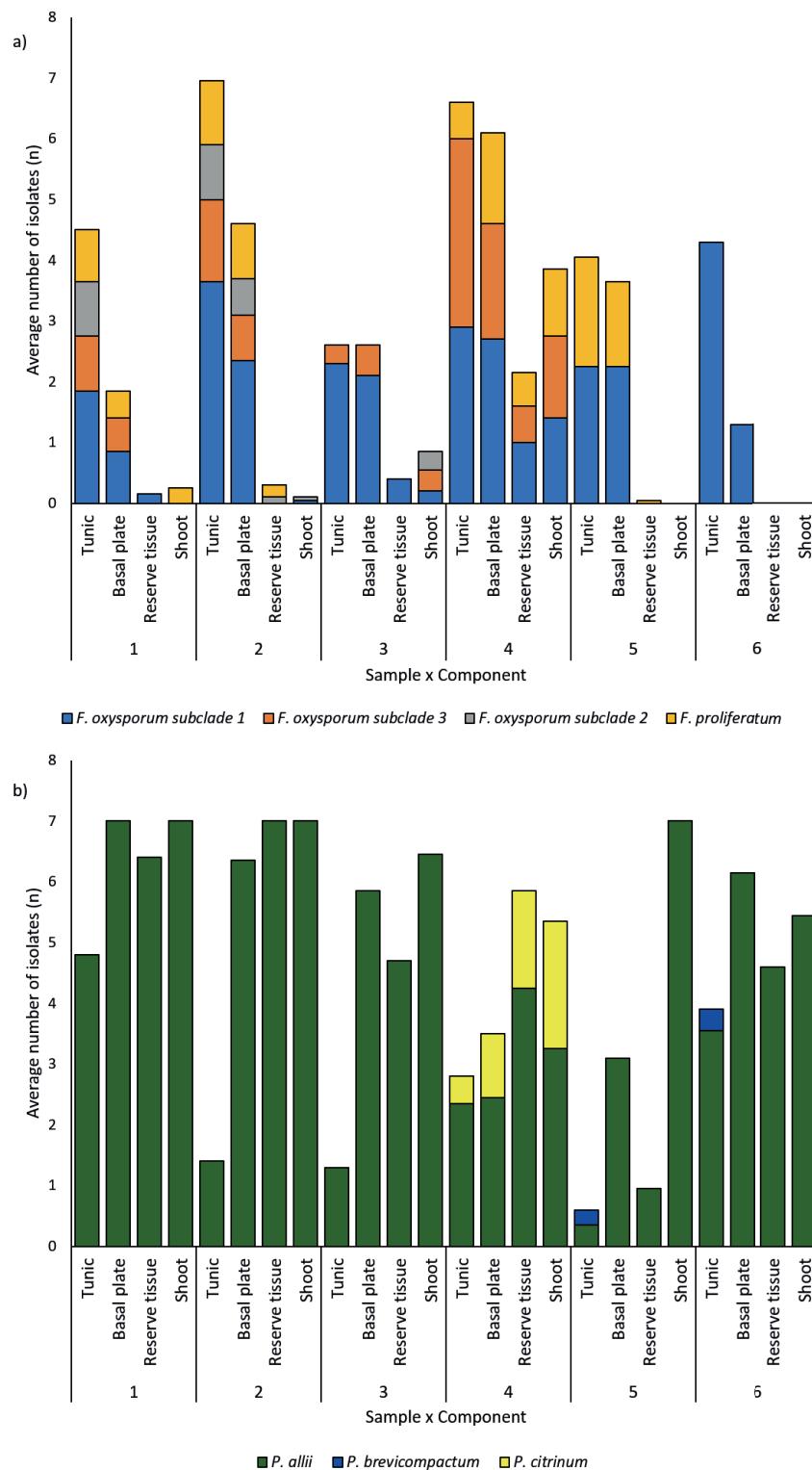


Figure S2. Average number of isolates (n) per elephant garlic sample and analyzed components belonging to the different *Fusarium* species/subclades (a) and *Penicillium* species (b). The identification was performed by partial *translation elongation factor 1 α* sequencing for *Fusarium* and by β -tubulin (*BenA*) and *calmodulin* (*CaM*) genes sequencing for *Penicillium*. Columns represent the *Fusarium* (a) and *Penicillium* (b) community composition per each sample and component expressed as the average number of isolates of different species developed from each elephant garlic sample and component.