

Supplementary material

Table S1. Growth rate (mm/day) of macrofungi on Agar-JSC plates, SSF-JSC flasks and CSC-Agar and SSF-CSC flasks

Fungi		Growth-rate (mm/day) \pm SD			
Code	Name	Agar-JSC (Petri dish)	SSF-JSC (flask)	Agar-CSC (Petri dish)	SSF-CSC (flask)
INPA 1643	<i>Stereum sp.</i>	3.62 \pm 0.49c	NG	3.53 \pm 0.57b	NG
INPA 1644	<i>Schizophyllum commune</i>	3.70 \pm 0.12c	NG	3.78 \pm 0.68b	NG
INPA 1646	<i>Coriolopsis sp.</i>	7.37 \pm 0.13a	2.97 \pm 0.34a	6.96 \pm 0.36 ^a	2.42 \pm 0.28a
INPA 1668	<i>Trametes sp.</i>	3.66 \pm 0.86c	NG	3.47 \pm 0.24b	NG
INPA 1681	<i>Trametes sp.</i>	3.63 \pm 0.24c	NG	3.70 \pm 0.41b	NG
INPA 1689	<i>Trametes sp.</i>	3.66 \pm 0.49 c	NG	3.91 \pm 0.67b	NG
INPA 1690	<i>Trametes sp.</i>	3.67 \pm 0.93c	NG	3.60 \pm 0.11b	1.98 \pm 0.47a
INPA 1694	NI	3.61 \pm 0.42c	2.41 \pm 0.65a	3.71 \pm 0.17b	NG
INPA 1695	<i>Trametes sp.</i>	3.55 \pm 0.60c	2.21 \pm 0.71a	3.91 \pm 0.39b	2.21 \pm 0.39a
INPA 1696	<i>Tyromyces sp.</i>	3.83 \pm 0.48c	2.04 \pm 0.43a	3.85 \pm 0.48b	2.14 \pm 0.34a
INPA 1698	<i>Trametes elegans</i>	1.92 \pm 0.31e	1.65 \pm 0.74b	2.38 \pm 0.78c	1.37 \pm 0.17b
INPA 1719	<i>Trametes sp.</i>	3.36 \pm 0.22c	1.43 \pm 0.32b	3.70 \pm 0.42b	NG

INPA 1720	<i>Schizophyllum commune</i>	$3.68 \pm 0.13c$	NG	$3.65 \pm 0.00b$	$2.16 \pm 0.41a$
INPA 1725	<i>Hexagonia hydroides</i>	$3.73 \pm 0.52c$	$2.40 \pm 0.48a$	$3.72 \pm 0.72b$	$1.46 \pm 0.23b$
INPA 1734	NI	$2.79 \pm 0.26d$	NG	$3.28 \pm 0.50b$	NG
INPA 1739	<i>Flavodon flavus</i>	$7.04 \pm 0.02b$	$2.56 \pm 0.48a$	$7.31 \pm 0.20a$	$2.34 \pm 0.49a$

NI: no-identified, NG: no-growth. Letters next to each metric value correspond to comparisons of the averages in the same column and not between one column and another (Tukey test $p \leq 0.05$). The fungi in bold were selected to continue the work.

Tabela S2. Literature results for degradation of phorbol esters in JSC, via solid-state fermentation by macrofungi.

Fungus	Degradation rate	Fermentation time	Reference
<i>Pleurotus ostreatus</i>	37%	15 days	LUZ et al., 2013
	60%	45 days	
	99%	60 days	
<i>Pleurotus ostreatus</i>	58%	15 days	KASUYA et al., 2012
	85%	30 days	
	99%	45 days	
<i>Pleurotus sapidus</i>	76%	20 days	BOSE; KEHARIA, 2014
<i>Pleurotus ostreatus</i>	72.5%		
<i>Pleurotus florida</i>	67.9%		
<i>Pleurotus sajor-caju</i>	67.9%		
<i>Ganoderma lucidum</i>	100%	20 days	BOSE; KEHARIA, 2014
<i>Trametes zonata</i>	100%		
<i>Trametes gibbosa</i>	91.7%		
<i>Trametes versicolor</i>	89%		
<i>Trametes hirsuta</i>	81.6%		
<i>Phanerochaete chrysosporium</i>	44.9%		
<i>Phlebia rufa</i>	97%	30 days	BARROS <i>et</i> <i>al.</i> , 2011
<i>Bjerkandera adusta</i>	91%		
<i>Ganoderma resinaceum</i>	20%		

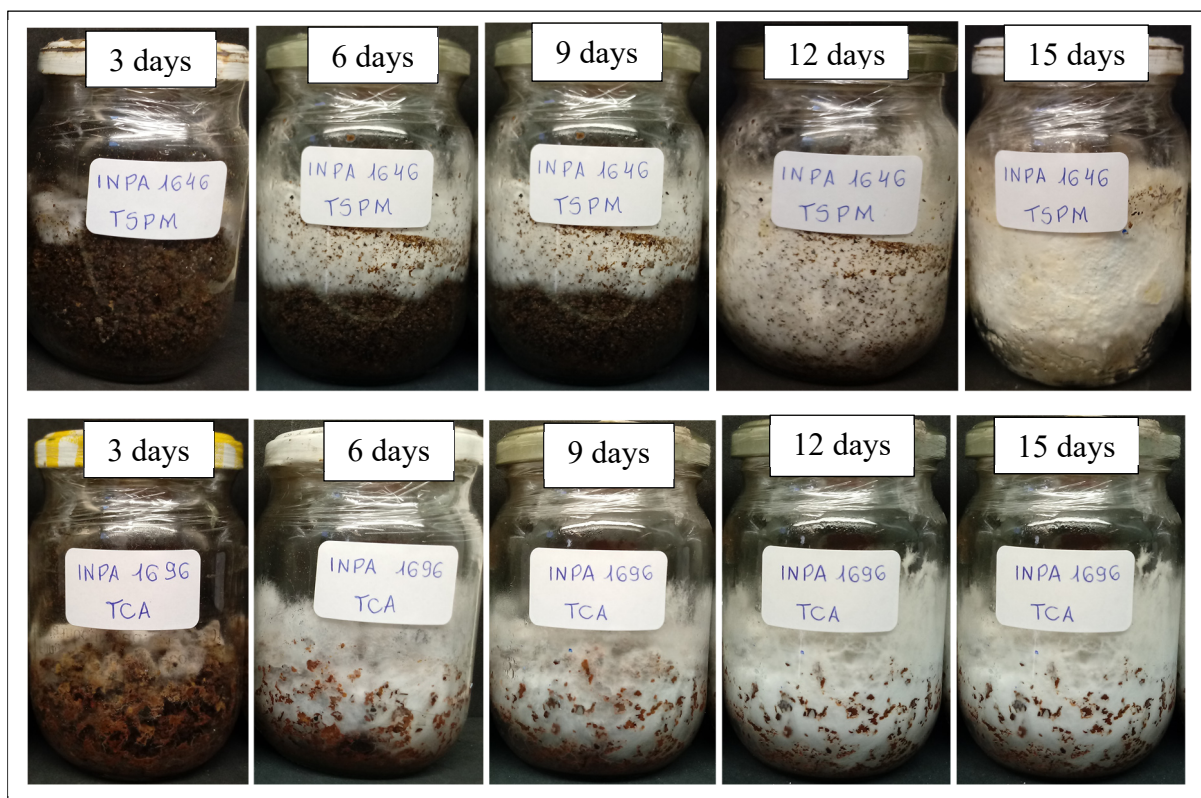


Figure S1. Pictures of the glass flasks containing the fermented cakes after 3, 6, 9, 12 and 15 days of incubation at 28°C, to illustrate the level of colonization of JSC and CSC by macrofungi *Coriolopsis sp.* and *Tyromices sp.*, respectively.

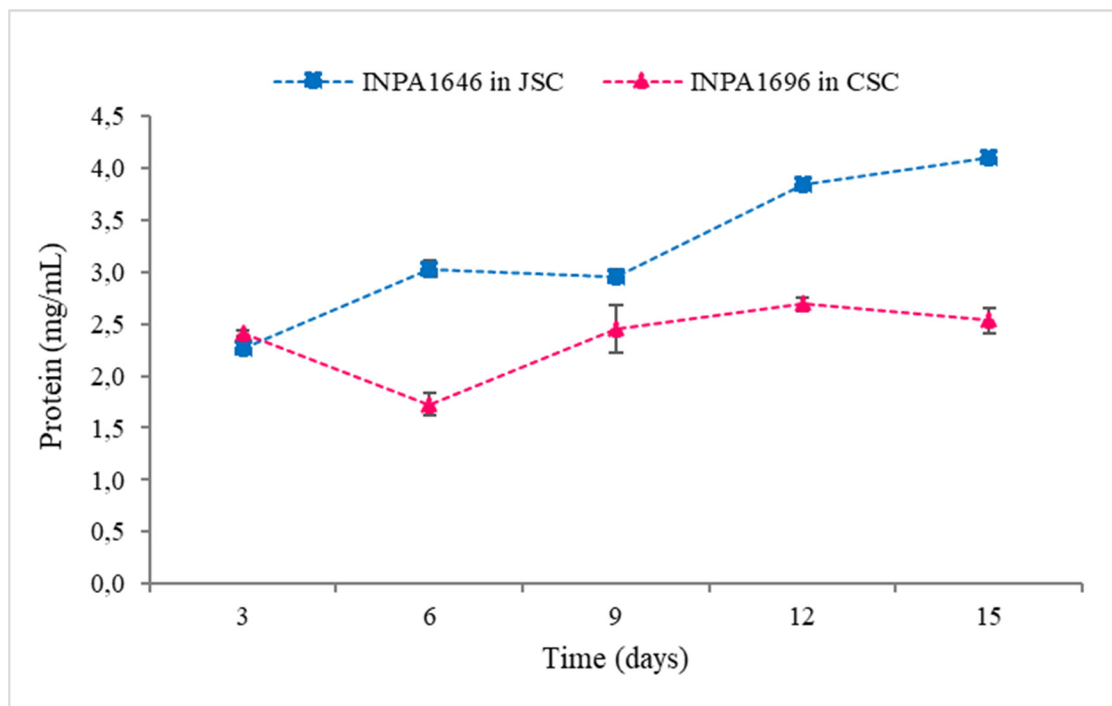


Figure S2. Total soluble protein kinetics in the crude extracts of SSF-JSC and SSF-CSC using *Corioliopsis sp.* and *Tyromices sp.*, respectively.

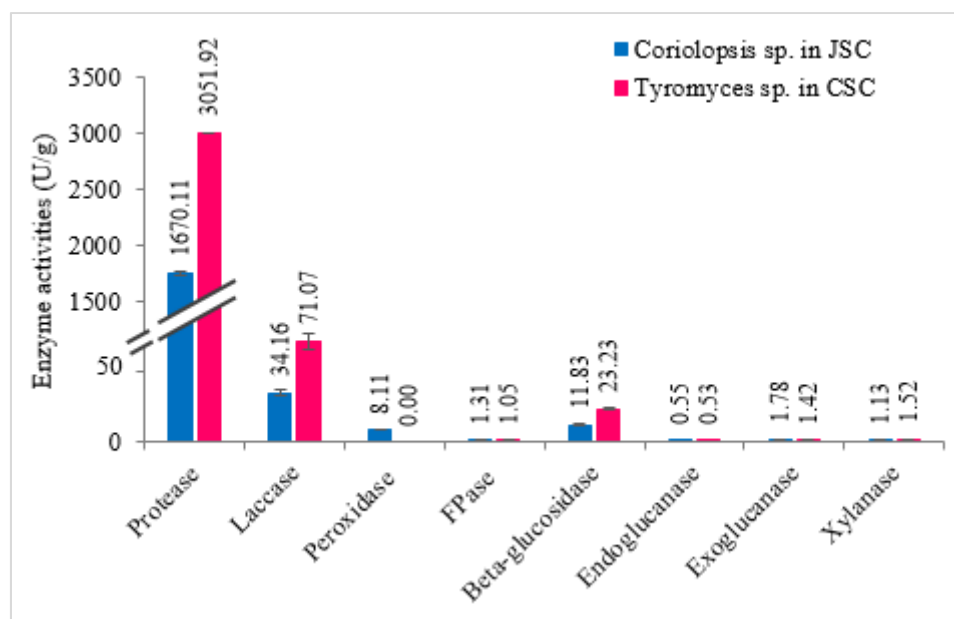


Figure S3. Total enzyme activities in the crude extracts of SSF-CSC and SSF-JSC using macrofungi *Tyromyces sp.* and *Coriolopsis sp.*, respectively, after 15 days of fermentation.