Article

Manufacture of a potential antifungal ingredient using lactic acid bacteria from dry-cured sausages

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Table S1. Elaboration of meat broths for fermentation for lactic acid bacteria.

Ingredient	***Concentration (g/L)***				
	MB2	**MB4**	**MB8**	**MB10**	**MRSb**
Dextrose	20.00	20.00	20.00	20.00	20.00
Meat extract	-	-	-	-	8.00
Yeast extract	-	-	-	-	4.00
Peptone	10.00	10.00	10.00	10.00	10.00
Sodium acetate	5.00	5.00	5.00	5.00	5.00
Dipotassium phosphate	2.00	2.00	2.00	2.00	2.00
Ammonium citrate	2.00	2.00	2.00	2.00	2.00
Magnesium sulfate	0.20	0.20	0.20	0.20	0.20
Manganese sulfate	0.05	0.05	0.05	0.05	0.05
Tween (mL/L)	1.00	1.00	1.00	1.00	1.00
Lyophilized pork loin	2.00	4.00	8.00	10.00	-

Table S2. Antifungal activity of formulated meat broths (MB) and MRS broth fermented by *Pediococcus pentosaceus* C15 during 24, 48, and 72 h at 37 °C. The bacterial-free supernatant (BFS) was freeze-dried, resuspended at a concentration of 500 g/L, and tested against six toxigenic fungi.

Fungal strain	**BFS of *Pediococcus pentosaceus* C15 (500 g/L)**					
	24 h		**48 h**		**72 h**	
	MRSb	**MB10**	**MRSb**	**MB10**	**MRSb**	**MB10**
Aspergillus flavus	+	-	++	++	+	+
Aspergillus parasiticus	+	-	++	+	+	+
Penicillium commune	++	+	+++	+++	+++	++
Penicillium griseofulvum	++		+++	+++	++	++
Penicillium nordicum	++	+	+++	+++	++	++
Penicillium verrucosum	++	+	+++	+++	+++	++

(+) Represents a growth inhibition halo of 0.2 cm; (++) represents a growth inhibition halo of between 0.2 to 0.4 cm; (+++) represents a growth inhibition halo greater than 0.4 cm.

Table S3. Identification of Volatile Organic Compounds (VOCs) of the fermented Meat Broth 10, with retention time, chemical class, calculated LRI (LRI exp.), and references.

Nº	Rt	Compound	Class	Identif.	LRI exp.	LRI lit.	Reference
1	3.11	Acetic acid	Acid	MS			
2	4.55	Pyrazine, methyl-	Pyrazine	MS + LRI	805	807	[1]
3	5.78	2-Heptanone	Ketone	MS + LRI	859	859	[2]
4	6.25	Heptanal	Aldehyde	MS + LRI	880	882	[3]
5	6.37	Pyrazine, 2,5-dimethyl	Pyrazine	MS + LRI	885	883	[4]
6	8.71	2-Octanone	Ketone	MS + LRI	980	984	[5]
7	8.89	Octanal	Aldehyde	MS + LRI	988	991	[6]
8	8.97	2-Octanol	Alcohol	MS + LRI	991	990	[7]
9	10.77	Decane, 2-methyl	Alkane	MS + LRI	1063	1061	[8]
10	11.02	Benzeneacetaldehyde	Aldehyde	MS + LRI	1073	1071	[9]
11	11.19	1-Octanol	Alcohol	MS + LRI	1080	1079	[10]
12	11.28	2-Nonanone	Ketone	MS + LRI	1083	1083	[11]
13	11.42	Nonanal	Aldehyde	MS + LRI	1089	1089	[4]
14	11.62	2-Nonanol	Alcohol	MS + LRI	1097	1098	[12]
15	11.69	Undecane	Alkane	MS + Std	1100		
16	13.43	Phenylethyl alcohol	Alcohol	MS	1172		
17	13.60	1-Nonanol	Alcohol	MS + LRI	1180	1180	[13]
18	15.49	Nonanoic acid	Acid	MS + LRI	1261	1263	[3]
19	15.82	2-Decenal	Aldehyde	MS + LRI	1275	1270	[14]
20	15.88	1-Decanol	Alcohol	MS + LRI	1278	1279	[15]
21	16.11	2-Undecanone	Ketone	MS + LRI	1289	1273	[3]
22	16.27	2-Undecanol	Alcohol	MS + LRI	1296	1294	[16]
23	18.50	Dodecanal	Aldehyde	MS + LRI	1398	1405	[17]
24	20.45	2-Tridecanone	Ketone	MS + LRI	1493	1497	[18]

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