

Table S1 – Primers (Universal and species-specific) used for *Candida* species detection and size of fragments separated by agarose gel electrophoresis [57,75,77,78,80,166].

Species	Target	Primer sequences (F: forward; R: reverse)	Amplicon size (bp)	Annealing temperature (°C)
<i>C. albicans</i>	ITS	ITS1F: 5' – TCAACTTGTCACACCAGATTATT – 3'	632 ^[77]	45-55
		ITS4R: 5' – TCCTCCGCTTATTGATATGC – 3'		
		CALF: 5' – AGCTGCCGCCAGAGGTCTAA – 3'	583/446 ^[78]	55
		UNI2R: 5' – TTCTTTTCCTCCGCTTATTG – 3'		
	MP65 gene	CA64F: 5' – AACGGATCCATGTTATTCAAGTCTTTC – 3'	1144 ^[57]	60
		CA64R: 5' – GGGCTGCAGGTGCTTAGTTAGAGTAA – 3'		
		CABISF: 5' – ATGTTATTCAAGTCTTTCGTTACT – 3'	467 ^[57]	60
		CABISR: 5' – TGACATTAAATCCAGATAATTGAGC – 3'		
	ITS	CALBF: 5' – TTTATCAACTTGTCACACCAGA – 3'	273 ^[75]	72
		CALBR: 5' – ATCCCGCCTTACCACTACCG – 3'		
<i>C. glabrata</i>	ITS	ITS1F: 5' – CACGACTCGACACTTTCTAATT – 3'	402 ^[77]	45-55
		ITS4R: 5' – TCCTCCGCTTATTGATATGC – 3'		
		CGLF: 5' – TTGTCTGAGCTCGGAGAGAG – 3'	929/839 ^[78]	55
		UNI2R: 5' – TTCTTTTCCTCCGCTTATTG – 3'		
		CGLF: 5' – TTATCACACGACTCGACACT – 3'	423 ^[75]	72
		CGLR: 5' – CCCACATACTGATATGGCCTACAA – 3'		
	MP65 gene	GLA8F: 5' – GATGTTGTCACTAAGACTGTTCA – 3'	361 ^[57]	60
		GLA8R: 5' – AGTAGGAAGACAACCTGGCAAGG – 3'		
<i>C. tropicalis</i>	ITS	ITS2F: 5' – AAGAATTTAACGTGGAAACTTA – 3'	149 ^[77]	45-55
		ITS4R: 5' – TCCTCCGCTTATTGATATGC – 3'		
		CTRF: 5' – GATTTGCTTAATTGCCCCAC – 3'	583/507 ^[78]	55
		UNI2R: 5' – TTCTTTTCCTCCGCTTATTG – 3'		
		CTRF: 5' – CAATCCTACCGCCAGAGGTTAT – 3'	357 ^[75]	72
		CTRR: 5' – TGGCCACTAGCAAAATAAGCGT – 3'		
	MP65	TRPF: 5' – TTCTGTTGCCAACACC – 3'	257 ^[57]	60
	TRPR: 5' – TGCTGTAACCGGACAAA – 3'			
<i>C. parapsilosis</i>	ITS	ITS2F: 5' – GGCGGAGTATAAACTAATGGATAG – 3'	126 ^[77]	45-55
		ITS4R: 5' – TCCTCCGCTTATTGATATGC – 3'		
		CPLF: 5' – GTCAACCGATTATTTAATAG – 3'	570/370 ^[78]	55
		UNI2R: 5' – TTCTTTTCCTCCGCTTATTG – 3'		
		CPAF: 5' – GCCAGAGATTAAACTCAACCAA – 3'	320/300 ^[75]	72

		CPAR: 5' – CCTATCCATTAGTTTATACTCCGC – 3'		
	MP65	PAR15F: 5' – CTTCCGAAGCTAGCCAAGT – 3' PAR15R: 5' – GAGGATGAAGTGGAGTCG – 3'	124 ^[57]	60
<i>C. krusei</i>	ITS	CKRF: 5' – CTGGCCGAGCGAACTAGACT – 3' UNI2R: 5' – TTCTTTTCCTCCGCTTATTG – 3'	590/169 ^[78]	55
<i>C. guiliermondii</i>	ITS	CGLF: 5' – TTGGCCTAGAGATAGGTTGG – 3' UNI2R: 5' – TTCTTTTCCTCCGCTTATTG – 3'	668/512 ^[78]	55
	MP65	GUIL10F: 5' – CACCGTGGCTCTTGTTGCT – 3' GUIL10R: 5' – AGACTTGGCAGTGGAAACG – 3'	640 ^[57]	60
<i>C. lusitaniae</i>	ITS	CLSF: 5' – TTCGGAGCAACGCCTAACCG – 3' UNI2R: 5' – TTCTTTTCCTCCGCTTATTG – 3'	433/329 ^[78]	55
<i>C. dubliniensis</i>	ITS	CDBF: 5' – CTCAAACCCCTAGGTTTGG – 3' UNI2R: 5' – TTCTTTTCCTCCGCTTATTG – 3'	591/217 ^[78]	55
		CDU F: 5' – AACTTGTCACGAGATTATTTT – 3' CDU R: 5' – AAAGTTTGAAGAATAAAATGGC – 3'	300 ^[166]	55

Table S2 - List of primers used for Nested PCR. *Candida albicans* A9, *C. dubliniensis* 16F, *C. tropicalis* pk233, *C. tropicalis* NUM5076, *C. parapsilosis* IFO1068, *C. tropicalis* IF01396, *C. krusei* IFO0841, *C. kefyr* IFO0586, *C. guilliermondii* NUM4, *C. glabrata* ATCC2001, *C. lusitaniae* JCM05936 were used in this study. Kanbe (2002) reported that the nucleotide sequence of DNA topoisomerase II gene of *C. tropicalis* pk233 differs from that of *C. tropicalis* IFO1400, and that the nucleotide sequence of DNA topoisomerase II gene of *C. parapsilosis* IFO1068 differs from that of *C. parapsilosis* IFO1396. Therefore, *C. tropicalis* pk233, *C. tropicalis* NUM5076, *C. parapsilosis* IFO1068 and *C. parapsilosis* 1396 were referred to as *C. tropicalis* I, *C. tropicalis* II, *C. parapsilosis* I and *C. parapsilosis* II, respectively. Annealing temperature is 57°C [72].

Candida Spp.	Specific primers
<i>C. albicans</i>	CABF59F: 5' – TTGAACATCTCCAGTTTCAAAGGT – 3' CABR110R: 5' – GTTGGCGTTGGCAATAGCTCTG – 3' CADBR125R: 5' – AGCTAAATTCATAGCAGAAAGC – 3'
<i>C. dubliniensis</i>	CDBF28F: 5' – AAATGGGTTTGGTGCCAAATTA – 3' CDBR110R: 5' – GTTGGCATTGGCAATAGCTCTA – 3' CADBR125R: 5' – AGCTAAATTCATAGCAGAAAGC – 3'
<i>C. tropicalis I</i>	CTPIF36F: 5' – GTTGTACAAGCAGACATGGACTG – 3' CTPIR68R: 5' – CAAGGTGCCGTCTTCGGCTAAT – 3' CTPIR121R: 5' – TCAAGGTACAGTTATGGCCAAGTT – 3'
<i>C. tropicalis II</i>	CTPIIF36F: 5' – CTGGGAAATTATATAAGCAAGTT – 3' CTPIIR60R: 5' – CTTGAGATACTCAATCTTTTATC – 3' CTPIIR121R: 5' – TCAATGTACAATTATGACCGAGTT – 3'
<i>C. parapsilosis I</i>	CPPIF41F: 5' – TGACAATATGACAAAAGGTTGGTA – 3' CPPIR61R: 5' – ACTTTTAAAAGTGTAAACCGA – 3' CPPIR122R: 5' – TGTCAAGATCAACGTACATTTAGT – 3'
<i>C. parapsilosis II</i>	CPPIIF41F: 5' – GGACAACATGACAAAAGTCGGCA – 3' CPPIIR69R: 5' – TTGTGGTGTAAATCTTGGGAG – 3' CPPIIR122R: 5' – GGTAAGGATCAAAGTGCACCTTA – 3'
<i>C. krusei</i>	CKSF35F: 5' – GAGCCACGGTAAAGAATACACA – 3' CKSR57R: 5' – TTTAAAGTGACCCGGATACC – 3' CKSR110R: 5' – TTTCTCTGGCAATTCCAATCG – 3'
<i>C. kefyr</i>	CKFF35F: 5' – CTTCCAAAGGTCAGAAGTATGTCC – 3' CKFR85R: 5' – CTTCAAACGGTCTGAAACCT – 3' CKFR104R: 5' – CACGAAATCGTTAGGAACTTCAC – 3'
<i>C. glabrata</i>	CGBF35F: 5' – CCCAAAATGGCCGTAAGTATG – 3' CGBR103R: 5' – ATAGTCGCTACTAATATCACACC – 3' CGBR77R: 5' – CTGCTTGAAAGAAATATCGGAGAC – 3'
<i>C. guilliermondii</i>	CGLF41F: 5' – CCCAAAATCACAAGCTCAAGT – 3' CGLR61R: 5' – TACGACTTGAAGTTGCGAATTG – 3' CGLR103R: 5' – GATGACAATTTTCTCCAGAGGC – 3'
<i>C. lusitaniae</i>	CLTF39F: 5' – CATGTCGAAATGCAACCCCGG – 3' CLTR119R: 5' – GCGTACACTTGTGGCCATCTTTA – 3' CLTR125R: 5' – TCATTACCTACGACTTTGAG – 3'

Table S3 - Restriction Fragment Length Polymorphism (RFLP) fragment patterns in oral *Candida* spp. isolates with restriction enzymes. [9,83].

Primer sequence	<i>ITS1</i> - (5' – TCCGTAGGTGAACCTGCGG – 3')				
	<i>ITS4</i> - (5' – TCCTCCGCTTATTGATATGC – 3')				
Fragment sizes (bp)					
<i>Candida</i> spp.	<i>ITS1-ITS4</i>	<i>MspI</i>	<i>BfaI</i>	<i>HaeIII</i>	<i>DdeI</i>
<i>C. albicans</i>	535	238-297 ^[9]	-	90, 430 ^[83]	100, 420 ^[83]
<i>C. parapsilosis</i>	520	520 ^[9]	-	40, 110, 390 ^[83]	-
<i>C. tropicalis</i>	524	184-340 ^[9]	-	-	-
<i>C. krusei</i>	510	249-261 ^[9]	120-200 ^[83]	40, 90, 380 ^[83]	-
<i>C. guiliermondii</i>	608	82-155-371 ^[9]	-	-	-
<i>C. glabrata</i>	871	314-577 ^[9]	-	200, 650 ^[83]	-
<i>C. lusitaniae</i>	383	117-266 ^[9]	-	-	-
<i>C. kefyr</i>	721	721 ^[9]	-	-	-

Table S4 - Oligonucleotide probes used in for *Candida* spp. in non-oral isolates [89].

Species	Oligonucleotide probe sequence (Annealing temperature for the following is 55°C)
Positive Control	5' – GCATATCAATAAGCGGAGGA-3'
Negative Control	
Universal fungal probe (ITS)	5' – TTGACCTCRRATCAGGTAGGRATACCCGCTGAACTTAA-3'
<i>C. albicans</i>	5' – ATTGCTTGCGGCGGTAGCGTCTACCACGTATATCTTCAAAAACGCTTA TTTTGCTAGTGGCCACCACAATTTATTTTCATA – 3'
<i>C. tropicalis</i>	5' – AACGCTTATTTTGCTAGTGGCCACCACAATTTATTTTCATA – 3'
<i>C. parapsilosis</i>	5' – TTCCACTCATTGGTACAAACTCCAAACTTCTTCCAAA – 3'
<i>C. krusei</i>	5' – GACGCTTGGCGGCCGAGAGCGAGTGTTGCGAGACAACAAA – 3'
<i>C. glabrata</i>	5' – TAGGTTTTACCAACTCGGTGTTGATCTAGGGAGGGATAAGT – 3'

Table S5 - Primers used in Kasahara for the detection of *Candida* spp. with LAMP. Primers have *ITS2* as the target region [109].

Species	Primer name	Sequence
<i>C. albicans</i>	F3	5' – TCTGGTATTCCGGAGGGC – 3'
	B3	5' – AGTCCTACCTGATTTGAGGT – 3'
	FIP	5' – CTACCGTCTTTCAAGCAAACCCATGAGCGTCGTTTCTCCCT – 3'
	BIP	5' – TTGACAATGGCTTAGGTCTAACCAAAAAGATATACGTGGTGGACGTTAC – 3'
	LB	5' – CTCAACACCAAACCCAGCGG – 3'
<i>C. glabrata</i>	F3	5' – TGGTAGTGAGTGATACTCGTT – 3'
	B3	5' – CTAAAGACGTCTGTCTGCC – 3'
	FIP	5' – GCAGATTAATAGAGAAGCTTGCGCTGAGTTAACTTGAAATTGTAGGCC – 3'
	BIP	5' – GCGGCGGGGGTTAATACTGTCACAAAACACTCACTTATCCCT – 3'
	LF	5' – GGTTTTACCAACTCGGTGTTGATCT – 3'
<i>C. parapsilosis</i> group	F3	5' – CGCCCTTTGGTATTCCAA – 3'
	B3	5' – CCTCCGCTTATTGATATGCT – 3'
	FIP	5' – CAAGCAAACCCAGCGTATCGAGCGTCATTTCTCCCTCA – 3'
	BIP	5' – TTCCACTCATTGGTACAAACTCCAAGTTCAGCGGGTAGTCC – 3'
	LF	5' – CAACACCAAACCCGAGGGT – 3'
<i>C. tropicalis</i>	LB	5' – CTTCCAAATTCGACCTCAAATCAGG – 3'
	F3	5' – TTTGGTATTCCAAAGGGC – 3'
	B3	5' – AGTCCTACCTGATTTGAGGT – 3'
	FIP	5' – CCTAGCGTATTGCTCAACACCAAATGCCTGTTTGGAGCGTCA – 3'
	BIP	5' – ACGTGAAACTTATTTTAAGCGACTATAAATTGTGGTGGCCACTAG – 3'
LF	5' – CCGGGGGTTTGGAGGGAGAAA – 3'	