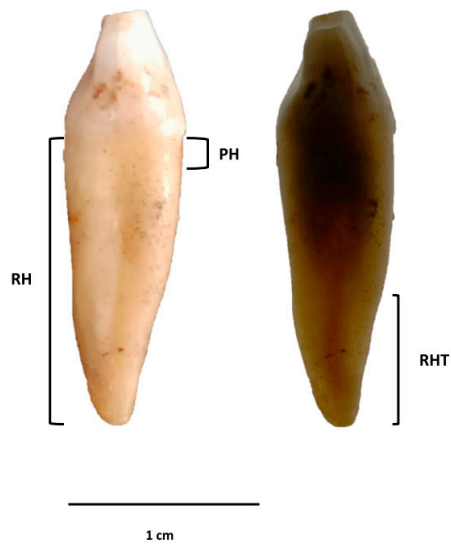


## SUPPLEMENTARY MATERIAL



**Figure S1:** Picture representing the measurement of root length (RH), periodontal retraction (PH), and root height translucency (RHT). RHT has been measured on the labial or buccal surface exposing the tooth to a light source.

**Table S1:** Bang and Ramm's coefficient for unsanctioned teeth based on tooth type and RHT > or < than 9 mm (modified by Bang and Ramm[19]).

Tooth type	RTH $\leq$ 9 mm			RHT > 9 mm	
	B <sub>0</sub>	B <sub>1</sub>	B <sub>2</sub>	B <sub>0</sub>	B
I <sup>1</sup>	20.3	5.74	0.000	20.34	5.74
<sup>1</sup> I	24.3	6.22	-0.119	26.78	4.96
I <sup>2</sup>	18.8	7.10	-0.164	22.06	5.36
<sup>2</sup> I	20.9	6.85	-0.223	25.57	4.38
C <sup>1</sup>	26.2	4.64	-0.044	28.13	4.01
<sup>1</sup> C	25.27	4.58	-0.073	27.59	3.65
P <sup>1</sup>	23.91	3.02	0.203	18.42	5.40
<sup>1</sup> P	23.91	3.02	0.203	18.42	5.40
P <sup>2</sup>	23.78	5.06	-0.064	25.33	4.28
<sup>2</sup> P	25.95	4.07	-0.067	26.92	3.37
I <sub>1</sub>	9.80	12.61	-0.711	29.00	4.23
<sub>1</sub> I	23.16	9.32	-0.539	37.56	2.94
I <sub>2</sub>	26.57	7.81	-0.383	38.81	2.81
<sub>2</sub> I	18.58	10.25	-0.538	33.65	3.53
C <sub>1</sub>	23.30	8.45	-0.348	37.80	3.50
<sub>1</sub> C	27.45	7.38	-0.289	41.50	2.84
P <sub>1</sub>	24.83	6.85	0.237	30.83	4.05
<sub>1</sub> P	29.17	5.96	-0.173	34.97	3.74
P <sub>2</sub>	29.42	4.49	-0.065	30.68	3.76
<sub>2</sub> P	18.72	5.79	-0.018	20.87	4.79
<sup>1,2,3</sup> M <sup>1,2,3</sup> mesial root	30.25	3.23	-0.018	30.56	3.00
<sub>1,2,3</sub> M <sub>1,2,3</sub> mesial root	27.39	6.25	-0.239	30.32	3.66
<sup>1,2,3</sup> M <sup>1,2,3</sup> distal root	34.73	0.67	0.211	29.49	3.32
<sub>1,2,3</sub> M <sub>1,2,3</sub> distal root	30.21	5.52	-0.181	31.46	3.77
<sup>1,2,3</sup> M <sup>1,2,3</sup> palatin root	27.43	3.64	0.039	26.81	4.07

**Table S2:** Total Italian sample characteristics and distribution by sex, chronological age, and tooth type

	Males N (%)	Females N (%)	Total N (%)
Total sample	63 (100)	92 (100)	155 (100)
18-29	9 (14.3)	25 (27.2)	34 (21.9)
30-39	2 (3.2)	7 (7.6)	9 (5.8)
40-49	8 (12.7)	11 (12.0)	19 (12.3)
50-59	12 (19.0)	17 (18.5)	29 (18.7)
60-69	14 (22.2)	11 (12.0)	25 (16.1)
70-79	13 (20.6)	9 (9.8)	22 (14.2)
80+	5 (7.9)	12 (13.0)	17 (11.0)
<b>Age groups</b>			
18-39	11 (17.5)	32 (34.8)	43 (27.7)
40-59	20 (31.7)	28 (30.4)	48 (31.0)
60+	32 (50.8)	32 (34.8)	64 (41.3)
<b>Tooth type</b>			
Single rooted	17 (27.0)	27 (29.3)	44 (28.4)
Multi-rooted	46 (73.0)	65 (70.7)	111 (71.6)

**Table S3:** ICC intra-operator (first part) e inter-operator (second part) variability for the total sample, age groups, and tooth type.

<i>Intra-operator variability (A1-A2)</i>			
	<b>RH ICC (95% CI) (N=155)</b>	<b>PH ICC (95% CI) (N=111)</b>	<b>RHT ICC (95% CI) N=155)</b>
Total sample	0.947 (0.928 – 0.961)	0.942 (0.919 – 0.959)	0.973 (0.963 – 0.980)
18-39 years	0.961 (0.929 – 0.979)	0.988 (0.977 – 0.993)	0.844 (0.730 – 0.912)
40-59 years	0.906 (0.838 – 0.946)	0.955 (0.918 – 0.975)	0.986 (0.972 – 0.992)
60+ years	0.954 (0.926 – 0.972)	0.875 (0.782 – 0.926)	0.886 (0.819 – 0.929)
Single-rooted	0.938 (0.889 – 0.966)	0.917 (0.841 – 0.956)	0.927 (0.869 – 0.959)
Multi-rooted	0.948 (0.926 – 0.964)	0.951 (0.929 – 0.967)	0.981 (0.972 – 0.987)
<i>Inter-operator variability (A1-B)</i>			
	<b>RH ICC (95% CI) (N=135)</b>	<b>PH ICC (95% CI) (N=97)</b>	<b>RHT ICC (95% CI) (N=136)</b>
Total sample	0.876 (0.824 – 0.912)	0.658 (0.323 – 0.628)	0.923 (0.887 – 0.947)
18-39 years	0.705 (0.414 – 0.850)	0.787 (0.486 – 0.912)	0.719 (0.478 – 0.849)
40-59 years	0.797 (0.612 – 0.894)	0.639 (0.219 – 0.832)	0.687 (0.401 – 0.838)
60+ years	0.909 (0.846 – 0.946)	0.349 (-0.177 – 0.640)	0.740 (0.556 – 0.847)
Single-rooted	0.932 (0.859 – 0.966)	0.543 (-0.042 – 0.797)	0.844 (0.690 – 0.921)
Multi-rooted	0.818 (0.728 – 0.878)	0.692 (0.505 – 0.808)	0.933 (0.897 – 0.956)



Total sample	-17.1	18.0	20.6	16 (14.3)	29 (25.9)	68 (60.7)
<40 years	-21.6	9.9	21.6	0 (0)	1 (25.0)	3 (75.0)
40-59 years	-12.8	15.6	16.6	8 (17.4)	15 (32.6)	21 (45.7)
≥60 years	-19.9	19.5	23.4	8 (12.7)	13 (20.6)	45 (70.3)
Single rooted	-19.2	20.1	23.6	5 (12.2)	8 (19.5)	29 (46.3)
Multi-rooted	-15.9	16.7	18.9	2 (2.8)	3 (4.2)	66 (93.0)