

Article

# Phytochemical Composition and *In Vitro* Biological Activity of *Iris* spp. (Iridaceae): A New Source of Bioactive Constituents for the Inhibition of Oral Bacterial Biofilms

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**Supplementary Table 1.** Disruption of mature biofilm: one-way analysis of variance (ANOVA) followed by Duncan's post hoc test ( $P < 0.05$ ) to show significant differences between methanol extracts of *Iris* spp. at concentration of 666.7 mg/L. Different letters (e.g., a and b) indicate significant differences based on post hoc Duncan's test ( $p \leq 0.05$ ). Similar or shared letters (e.g., a and ab) indicate no significant differences ( $p \leq 0.05$ ).

	<i>S. aureus</i>	<i>P. aeruginosa</i>	Dental plaque
<i>I. pallida</i> (L)	ab	a	jkl
<i>I. pallida</i> (R)	efghi	b	efghij
<i>I. pallida</i> (Rh)	hij	b	fghij
<i>I. versicolor</i> (L)	ijk	b	ghij
<i>I. versicolor</i> (R)	b	b	ghij
<i>I. versicolor</i> (Rh)	b	b	hij
<i>I. lactea</i> (L)	pgr	klm	qr
<i>I. lactea</i> (R)	c	defgh	klm
<i>I. lactea</i> (Rh)	pqr	lmnop	pqr
<i>I. carthaliniae</i> (L)	lmno	def	qr
<i>I. carthaliniae</i> (R)	JKL	lmn	qr
<i>I. carthaliniae</i> (Rh)	mnop	lmnop	opq
<i>I. germanica</i> (L)	cd	b	fghij
<i>I. germanica</i> (R)	nopq	rs	opq
<i>I. germanica</i> (Rh)	cd	cde	defg
Non-treated biofilm	s	s	s

L – leaves; R – roots; Rh – rhizomes.

**Supplementary Table 2.** Concentration of *Iris* spp. extract halving respective activity: (1) adhesion of bacteria forming biofilm and (2) mature biofilm: one-way analysis of variance (ANOVA) followed by Duncan's post hoc test ( $P < 0.05$ ) showing significant differences between methanol extracts of *Iris* spp. at concentration of 666.7 mg/L. Different letters (e.g., a and b) indicate significant differences

based on post hoc Duncan's test ( $P \leq 0.05$ ). Similar or shared letters (e.g., a and ab) indicate no significant differences ( $P \leq 0.05$ ).

	Anti-adhesion IC <sub>50</sub> [mg/L]			Anti-biofilm IC <sub>50</sub> [mg/L]	
	<i>S. aureus</i>	<i>P. aeruginosa</i>	Dental plaque	<i>S. aureus</i>	<i>P. aeruginosa</i>
<i>I. pallida</i> (L)	ab	a	a	a	a
<i>I. pallida</i> (R)	b	ab	b		b
<i>I. pallida</i> (Rh)	d	d	c		c
<i>I. versicolor</i> (L)	ab	b	b		b
<i>I. versicolor</i> (R)	ab	c	b	b	b
<i>I. versicolor</i> (Rh)	a	ab	a	b	b
<i>I. lactea</i> (L)					
<i>I. lactea</i> (R)	c	e	c		
<i>I. lactea</i> (Rh)	de				
<i>I. carthaliniae</i> (L)	f	f			
<i>I. carthaliniae</i> (R)	ef				
<i>I. carthaliniae</i> (Rh)					
<i>I. germanica</i> (L)	b	d	b		b
<i>I. germanica</i> (R)	d				
<i>I. germanica</i> (Rh)	c	g	c		

L – leaves; R – roots; Rh – rhizomes.

**Supplementary Table 3.** Concentration of *Iris* spp. extract halving quorum sensing of *Vibrio campbellii*: one-way analysis of variance (ANOVA) followed by Duncan's post hoc test ( $P < 0.05$ ) showing significant differences between methanol extracts of *Iris* spp. at concentration of 666.7 mg/L. Different letters (e.g. a and b) indicate significant differences based on post-hoc Duncan's test ( $p \leq 0.05$ ). Similar or shared letters (e.g. a and ab) indicate no significant differences ( $p \leq 0.05$ ).

	V. campbellii BAA1118	V. campbellii BAA1119
	QS IC <sub>50</sub> [mg/L]	QS IC <sub>50</sub> [mg/L]
<i>I. pallida</i> (L)	c	b
<i>I. pallida</i> (R)	cd	
<i>I. pallida</i> (Rh)		
<i>I. versicolor</i> (L)	c	
<i>I. versicolor</i> (R)	c	b
<i>I. versicolor</i> (Rh)	d	b
<i>I. lactea</i> (L)		
<i>I. lactea</i> (R)		
<i>I. lactea</i> (Rh)		
<i>I. carthaliniae</i> (L)		
<i>I. carthaliniae</i> (R)		
<i>I. carthaliniae</i> (Rh)		
<i>I. germanica</i> (L)	b	
<i>I. germanica</i> (R)		
<i>I. germanica</i> (Rh)		
Erythromycin	a	a

L – leaves; R – roots; Rh – rhizomes.