

**Table 1.** Frequencies of transfer of marker genes to both cultured and natural communities. N/A indicates not applicable; BDL, below detection limit.

Environment	Avg. spontaneous frequency	Range	Avg. GTA-mediated rate	Range	Number of trials
<i>Roseovarius nubinhibens</i> GTA filter matings					
Culture	$6 \times 10^{-7}$	$5.2 \times 10^{-8}$ – $2.0 \times 10^{-6}$	$1.7 \times 10^{-5}$	$7.5 \times 10^{-8}$ – $7.9 \times 10^{-5}$	$n = 5$
Estuary	$1.6 \times 10^{-4}$	$2.8 \times 10^{-5}$ – $3.0 \times 10^{-4}$	$8.9 \times 10^{-4}$	$6.2 \times 10^{-5}$ – $1.1 \times 10^{-3}$	$n = 3$
<i>Roseovarius nubinhibens</i> GTA liquid matings					
Estuary	$1.2 \times 10^{-3}$	N/A	$3.1 \times 10^{-2}$	$1.2 \times 10^{-2}$ – $5.0 \times 10^{-2}$	$n = 2$
Coastal	$4.3 \times 10^{-2}$	N/A	$2.8 \times 10^{-1}$	N/A	$n = 2$
Open ocean	$2.5 \times 10^{-2}$	$6.7 \times 10^{-3}$ – $4.3 \times 10^{-2}$	$3.9 \times 10^{-1}$	$2.8 \times 10^{-1}$ – $4.0 \times 10^{-1}$	$n = 3$
Reef	$4.6 \times 10^{-4}$	N/A	$2.5 \times 10^{-2}$	N/A	$n = 1$
Reef (double antibiotic)	BDL ( $<10^{-6}$ )	N/A	$1.06 \times 10^{-4}$	N/A	$n = 1$
<i>Reuveria mobilis</i> (45A6) GTA liquid matings					
Estuary	$1.2 \times 10^{-3}$	$0-2.1 \times 10^{-2}$	$2.4 \times 10^{-2}$	$4.2 \times 10^{-2}$ – $1.1 \times 10^0$	$n = 1$
Coastal	$4.3 \times 10^{-2}$	$3.0 \times 10^{-2}$ – $5.6 \times 10^{-2}$	$2.8 \times 10^{-1}$	$1.6 \times 10^{-1}$ – $6.4 \times 10^{-1}$	$n = 1$
Open ocean	$3.3 \times 10^{-3}$	$0 - 1 \times 10^{-2}$	$4.7 \times 10^{-1}$	$0 - 3.6 \times 10^0$	$n = 2$
Reef	$4.6 \times 10^{-4}$	N/A	$1.1 \times 10^{-1}$	N/A	$n = 1$