

A

		Alignment Position								
	1	2	3	4	5	6	7	8	9	
OTUS	A	A	A	C	T	A	T	G	G	C
	B	A	C	T	A	T	G	G	C	A
	C	A	T	A	C	T	A	T	G	G
	D	A	T	A	C	T	A	T	G	G
	E	A	A	T	G	G	C	A	C	A
	F	A	A	C	T	T	T	G	G	C
	G	A	C	T	A	T	G	G	C	A
	H	A	A	C	T	A	T	G	G	C

B

		Alignment Position												
	1	2	3	4	5	6	7	8	9	10	11	12	13	
OTUS	A	A	-	A	C	T	A	T	G	G	C	-	-	-
	B	A	-	-	C	T	A	T	G	G	C	A	-	-
	C	A	T	A	C	T	A	T	G	G	-	-	-	-
	D	A	T	A	C	T	A	T	G	G	-	-	-	-
	E	A	-	-	-	-	A	T	G	G	C	A	C	A
	F	A	-	A	C	T	T	T	G	G	C	-	-	-
	G	A	-	-	C	T	A	T	G	G	C	A	-	-
	H	A	-	A	C	T	A	T	G	G	C	-	-	-

FIGURE 27.4. (A) Alignment showing character states for nine alignment positions in eight genes (A–H). (B) Alignment with gaps illustrating how the alignment in A could be improved by allowing gaps.