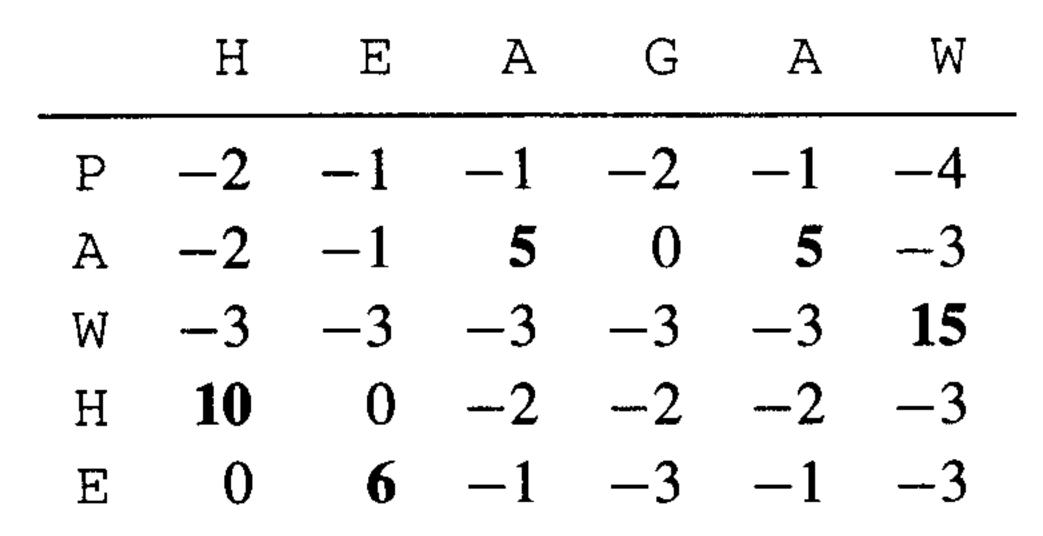
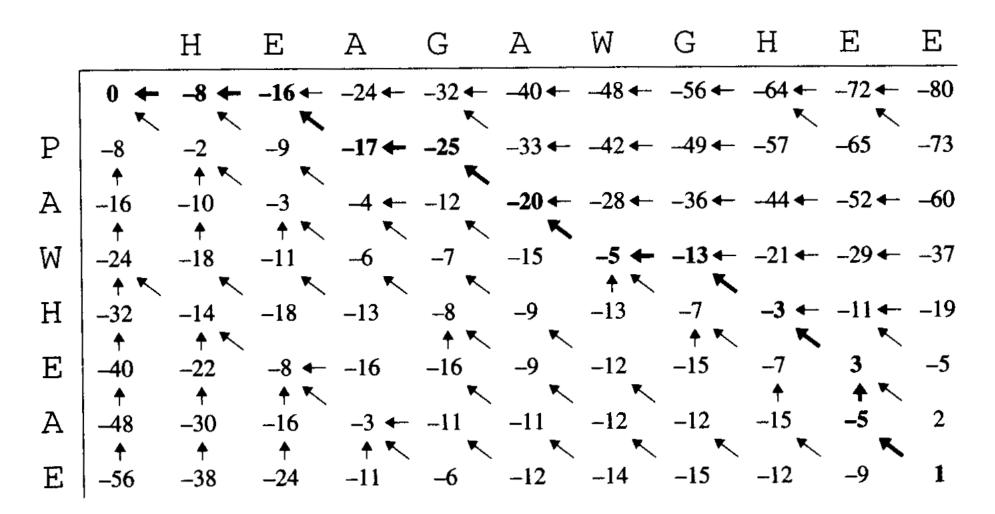
PAM 50

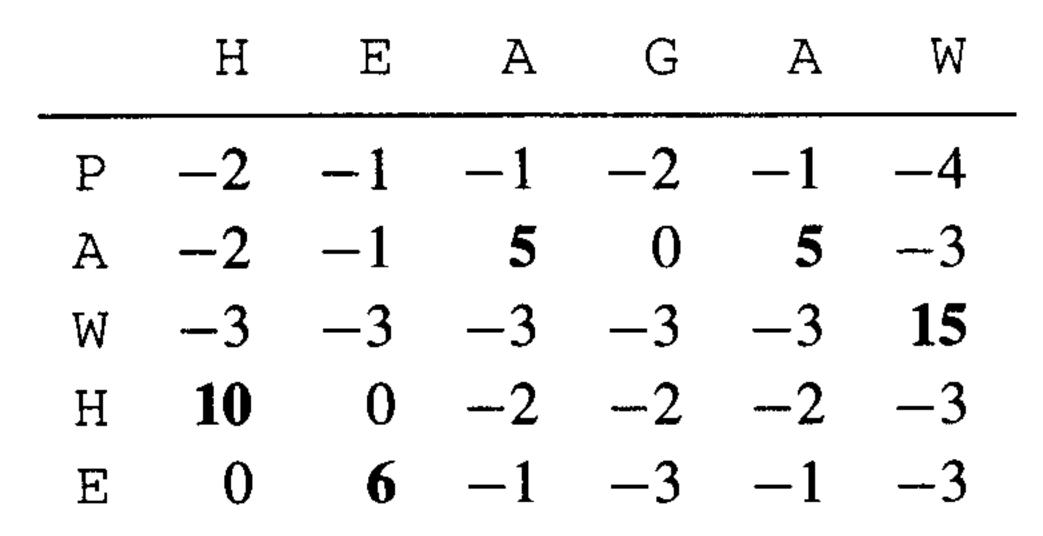


OGA example



HEAGAWGHE-E --P-AW-HEAE

PAM 50



OGA example

		Н	E	А	G	А	W	G	Η	E	E
-	0	0	0	0	0	0	0	0	0	0	0
Ρ	0	0	0	0	0	0	0	0	0	0	0
Α	0	0	0	5 K	0	5	0	0	0	0	0
W	0	0	0	0	2	0	20 ← ↑ [×]	12 ← K	4	0	0
Η	0	10 ← ↑ ┖	2	0	0	0	12	18	22 🕂	14 🔶	6
Ε	0	2	16 🔶	8	0	0	т 4	↑ × 10	18	28	20
A	0	0	↑ × 8	21 🖛	13	5	0	4	↑ 10	↑ × 20	27
E	0	0	6	↑ × 13	18	12 ←	4	0	4	ب 16	26

AWGHE AW-HE

Waterman-Eggert (I)

	А	G	T	С	Ç	G	А	G	G	G	С	Τ_	A	С	<u>T</u>	С	Ţ	A	<u> </u>	T	G	А	A	C
С	0	0	0	10	10	0	0	0	0	0	10	0	0	10	0	10	0	0	10	0	0	0	0	10
С	0	0	0	10	20	1	0	0	0	0	10	1	0	10	1	10	1	0	10	1	0	0	0	10
А	10	0	0	0	1	11	11	0	0	0	0	1[11	0	1	0	1	11	0	1	0	10	10	0
Α	10	1	0	0	0	0	21	2	0	0	0	0	11[2	0	0	0	11	2	0	0	10	20	1
Т	0	1	11	0	0	0	1	12	0	0	0	10	0	2	12	0	10	0	2	12	0	0	1	11
С	0	0	0	21	10	0	0	0	3	0	10	0	1	10	0	22	2	1	10	0		0	0	11
Т	0	0	10	1	12	1	0	0	0	0	0	20	0	0	20	2[32	12	0	20	0	0	0	0
Α	10	0	0	1	0	3	11	0	0	0	0	0	30	10	0	11	12	42		2	11	10	10	0
С	0	1	0	10	11	0	0	2	0	0	10	0	10	40	20	10	2	22	52	32	12	2	1	20
Ť	0	0	11	0	1	2	0	0	0	0	0	20	0	20	50	30	20	2	32		42	22	2	0
A	10	0	0	2	0	0	12	0	0	0	0	0	30	10	30	41	21	30	12	42	53	52	32	12
С	0	1	0	10	12	0	0	3	0	0	10	0	10	40	20	40	32	12	40	22	33	44	43	42
Т	0	0	11	0	1	3	0	0	0	0	0	20	0	20	50	30	50	30	20	50	30	24	35	34
G	0	10	0	2	0	11	0	10	10	10	0	0	11	0	30	41	30	41	21	30	60	40	20	26
С	0	0	1	10	12	0	2	0	1	1	20	0	0	21	10	40	32	21	51	31	40	51	31	30
Т	0	0	10	0	1	3	0	0	0	0	0	30	10	1	31	20	50	30	31	61	41	31	42	22
Т	0	0	10	1	0	0	0	0	0	0	0	10	21	1	11	22	30	41	21	41	52	32	22	33
G	0	10	0	1	0	10	0	10	10	10	0	0	1	12	0	2	13	21	32	21	51	43	23	13
С	0	0	1	10	11	0	1	0	1	1	20	0	0	11	3	10	0	4	31	23	31	42	34	33
А	10	0	0	0	1	2	10	0	0	0	0	11	10	0	2	0	1	10	11	22	14	41	52	32
G	0	20	0	0	0	11	0	20	10	10	0	0	2	1	0	0	0	0	1	2	32	21	32	43
Т	0	0	30	10	0	0	2	0	11	1	1	10	0	0	11	0	10	0	0	11	12	23	12	23
A	10	0	10	21	1	0	10	0	0	2	0	0	20	0	0	2	0	20	0	0	2	22	33	13
С	0	1	0	20	31	11	0	1	0	0	12	0	0	30	10	10	0	0	30	10	0	2	13	43

Waterman-Eggert (II)

	А	G_	Т	С	C_	G	A	G	G	G_	С	т	A	C	T	С	<u>T</u>	A	C_	Т	G	A	A	<u>C</u>
С	0	0	0	10	10	0	0	0	0	0	0*	0*	0	10	0	10	0	0	10	0	0	0	0	10
С	0	0	0	10	20	1	0	0	0	0	10*	0*	0*	10	1	10	1	0	10	1	0	0	0	10
А	10	0	0	0	1	11	11	0	0	0	0	1*	0*	• 0 *	1	0	1	11	0	1	0	10	10	0
А	10	1	0	0	0	0	21	2	0	0	0	0	11*	• 0 *	* 0 *	• 0	0	11	2	0	0	10	20	1
Т	0	1	11	0	0	0	1	12	0	0_	0	10	0	2*	· 0 *	× 0 *	10	0	2	12	0	0	1	11
С	0	0	0	21	10	0	0	0	3	0	10	0	1	10	0,4	* 0*	<pre>0 *</pre>	1*	10	0	3	0	0	11
т	0	0	10	1	12	1	0	0	0	0	0	20		0	20	0*	-	-	-	20	0	0	0	0
А	10	0	0	1	0	3	11	0	0	0	0	0	30	10	0	11,	~	•	+	-	11,		10	0
С	0	1	0	10	11	0	0	2	0	0	10	0	10	40	20	10	2*				-		_	20
Т	0	0	11	0	1	2	0	0	0	0	0	20	0	20	50	30	20		* 0 ×		-	-	•	•
А	10	0	0	2	0	0	12	0	0	0	0	0	30				21		*10*		_	*10,		-
С	0	1	0	10	12	0	0	3	0	0	10	0	10	40	20	40	32		40,			•	_	·20,
Т	0	0	11	0	1	3	0	0	0	0	0	20	0	20	50	30	50		-			*10*		Ý
G	0	10	0	2	0	11	0	10	10	10	0	0	11	0	30	41	30		21		60		*20*	
С	0	0	1	10	12	0	2	0	1	1	20	0	0	21	10	40	32	21	51	31	40	51	31	30,
Т	0	0	10	0	1	3	0	0	0	0	0	30	10	1	31	20	50	30	31	61	•	31	42	22
Т	0	0	10	1	0	0	0	0	0	0	0	10	21	1	11	22	30	41	21	41	52	32	22	33
G	0	10	0	1	0	10	0	10	10	10	0	0	1	12	0	2	13	21	32	21	51	43	23	13
С	0	0	1	10	11	0	1	0	1	1	20	0	0	11	3	10	0	4	31	23	31	42	34	33
Α	10	0	0	0	1	2	10	0	0	0	0	11	10	0	2	0	1	10	11	22	14	41	52	32
G	0	20	0	0	0	11	0	20	10	10	0	0	2	1	0	0	0	0	1	2	32	21	32	43
Т	0	0	30	10	0	0	2	0	11	1	1	10	0	0	11	0	10	0	0	11	12	23	12	23
А	10	0	10	21	1	0	10	0	0	2	0	0	20	0	0	2	0	20	0	0	2	22	33	13
С	0	1	0	20	31	11	0	1	0	0	12	0	0	30	10	10	0	0	30	10	0	2	13	43

minimal envelope for shifted gap function

