

Table 1  
Odorant-induced ongoing activities in the *Helix procerebrum*<sup>a</sup>

Odorant	Concentration	Total		With particular responses		Peak power freq. (Hz)	Range (Hz)	% Change of RMS-voltage (0.5-15 Hz) Mean (range)	Latency (min)	Duration (min)
		a	b	c	d					
Ethanol	Undiluted	9;	28	7;	15	1.0-2.2	0.5-10	+159 (-17, +590)	Imm.-23	0.5->95
	1: 4	4;	8	3;	5	1.0-1.5	0.1-7	+27 (-32, +125)	Imm.-5	2.5-20
	1: 8	4;	9	4;	6	1.0-1.5	0.1-10	+25 (-7, +107)	Imm.-15	5->50
	1: 16	3;	11	3;	6	1.0-2.0	0.1-8	+9 (-11, +16)	Imm.-30	5-10
	1: 32	1;	6	1;	3	1.0	0.1-10	+4 (-10, +18)	9-10	5-10
2-Butanol	Undiluted	3;	6	3;	6	0.7	0.1-15	+47 (+17, +132)	Imm.-25	7->15
	1: 8	4;	5	4;	5	0.7	0.1-10	+30 (-7, +87)	Imm.-9	2-23
	1: 16	2;	2	2;	2	0.5-0.7	0.1-10	+25 (+5, +45)	1.5-4	7-10
	1: 32	4;	7	4;	6	0.6-0.7	0.1-8	-2 (-31, +16)	Imm.-22	5-15
	1: 64	2;	3	2;	3	0.7	0.1-10	+6 (-9, +17)	2-10	0.5-15
2-Pentanol	Undiluted	4;	5	4;	5	0.5-0.6	0.1-6	+44 (+19, +112)	Imm.-1	5->22
	1: 8	3;	5	3;	5	0.3-0.6	0.1-3.5	+22 (+5, +37)	Imm.-10	10->25
	1: 16	3;	5	3;	5	0.3-0.7	0.5-2	+2 (-5, +5)	Imm.	0.5-30
	1: 32	3;	3	3;	3	0.3-0.6	0.1-4	+207 (+0, +617)	Imm.-10	5-20
	1: 64	4;	5	4;	5	0.2-0.6	0.1-4	+5 (+0, +13)	Imm.-9	5-15
Formic acid	Undiluted	2;	4	2;	4	0.3-0.4	0.1-3.5	+285 (+38, +745)	Imm.	8-10
	1: 2	2;	3	2;	3	0.4-0.5	0.1-2.5	+835 (+25, +2218)	Imm.-2	>15
	1: 4	1;	1	1;	1	0.4	0.1-15	+271	Imm.	>10
	1: 8	10;	29	10;	29	0.2-0.6	0.1-15	+77 (-24, +500)	Imm.-5	5-40
	1: 16	5;	15	5;	14	0.3-0.4	0.1->50	+53 (-18, +605)	Imm.-9	5->30
	1: 32	2;	5	2;	4	0.3-0.4	0.1-6	+32 (+0, +100)	Imm.-15	2.5-25
	1: 64	1;	3	1;	3	0.3-0.5	0.1-10	+4 (+0, +11)	Imm.	15
Ammonia	1%	2;	4	2;	4	0.2	0.1-25	+96 (+25, +193)	Imm.	>10
	0.1%	3;	4	3;	4	0.2	0.1-25	+26 (+18, +41)	Imm.	>10
	0.01%	1;	1	1;	1	0.2	0.1-3	+5 (+5, +21)	Imm.	>10
Onion		3;	9	3;	8	0.2-0.6	0.1-7	+7 (+0, +21)	Imm.	10->15
Apple		1;	1	1;	1	1.2	0.5-2.5	+0	5	5

<sup>a</sup> (a) Number of all preparations tested; (b) number of all trials made with all the preparations; (c) number of preparations and (d) number of trials made with the preparations, in which particular responses were observed. Peak power frequency (Hz) (estimated from the single power spectra and average FAPs, weighting them on the curves obtained by subtracting the FAP curve of control from that of responses) varied within the range shown. Range (Hz) indicates the frequency range, in which power changed. That range covered those of all particular responses varying intra- and interindividually. (cf. Examples for ethanol and formic acid are shown in Fig. 5). Note that, in spite of a large variation, percent change of the amplitude (RMS-voltage) in the 0.5-15 Hz range; for ammonia at 0.1-15 Hz) seemed to suggest a certain dependency on odor intensity. The rate of percent change appeared to be different for each odorant and may also be considered to be related, not only to odor quantity, but to odor quality.