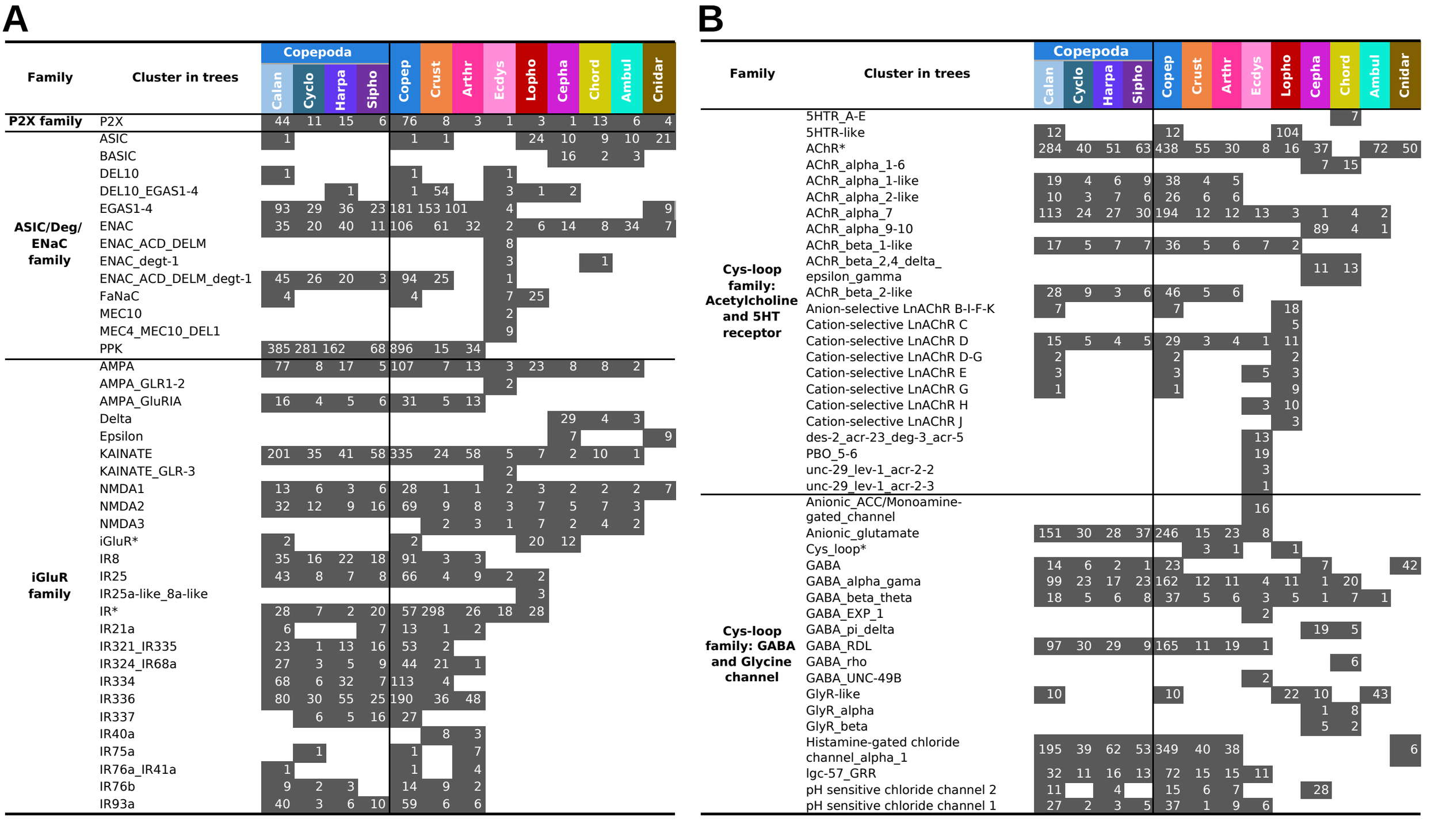


| Family | Cluster in trees | Copepoda | | | | Copep | Crust | Arthr | Ecdys | Lopho | Cepha | Chord | Ambul | Cnidar |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Calan | Cyclo | Harpa | Sipho | | | | | | | | | |
| P2X family | P2X | 44 | 11 | 15 | 6 | 76 | 8 | 3 | 1 | 3 | 1 | 13 | 6 | 4 |
| ASIC/Deg/ ENaC family | ASIC | 1 | | | | 1 | 1 | | | 24 | 10 | 9 | 10 | 21 |
| | BASIC | | | | | | | | | | 16 | 2 | 3 | |
| | DEL10 | 1 | | | | 1 | | | 1 | | | | | |
| | DEL10_EGAS1-4 | | | 1 | | 1 | 54 | | 3 | 1 | 2 | | | |
| | EGAS1-4 | 93 | 29 | 36 | 23 | 181 | 153 | 101 | 4 | | | | | 9 |
| | ENAC | 35 | 20 | 40 | 11 | 106 | 61 | 32 | 2 | 6 | 14 | 8 | 34 | 7 |
| | ENAC_ACD_DELM | | | | | | | | 8 | | | | | |
| | ENAC_degt-1 | | | | | | | | 3 | | | 1 | | |
| | ENAC_ACD_DELM_degt-1 | 45 | 26 | 20 | 3 | 94 | 25 | | 1 | | | | | |
| | FaNaC | 4 | | | | 4 | | | 7 | 25 | | | | |
| | MEC10 | | | | | | | | 2 | | | | | |
| | MEC4_MEC10_DEL1 | | | | | | | | 9 | | | | | |
| | PPK | 385 | 281 | 162 | 68 | 896 | 15 | 34 | | | | | | |
| iGluR family | AMPA | 77 | 8 | 17 | 5 | 107 | 7 | 13 | 3 | 23 | 8 | 8 | 2 | |
| | AMPA_GLR1-2 | | | | | | | | 2 | | | | | |
| | AMPA_GluRIA | 16 | 4 | 5 | 6 | 31 | 5 | 13 | | | | | | |
| | Delta | | | | | | | | | | 29 | 4 | 3 | |
| | Epsilon | | | | | | | | | | 7 | | | 9 |
| | KAINATE | 201 | 35 | 41 | 58 | 335 | 24 | 58 | 5 | 7 | 2 | 10 | 1 | |
| | KAINATE_GLR-3 | | | | | | | | 2 | | | | | |
| | NMDA1 | 13 | 6 | 3 | 6 | 28 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 7 |
| | NMDA2 | 32 | 12 | 9 | 16 | 69 | 9 | 8 | 3 | 7 | 5 | 7 | 3 | |
| | NMDA3 | | | | | | 2 | 3 | 1 | 7 | 2 | 4 | 2 | |
| | iGluR* | 2 | | | | 2 | | | | 20 | 12 | | | |
| | IR8 | 35 | 16 | 22 | 18 | 91 | 3 | 3 | | | | | | |
| | IR25 | 43 | 8 | 7 | 8 | 66 | 4 | 9 | 2 | 2 | | | | |
| | IR25a-like_8a-like | | | | | | | | | 3 | | | | |
| | IR* | 28 | 7 | 2 | 20 | 57 | 298 | 26 | 18 | 28 | | | | |
| | IR21a | 6 | | | 7 | 13 | 1 | 2 | | | | | | |
| | IR321_IR335 | 23 | 1 | 13 | 16 | 53 | 2 | | | | | | | |
| | IR324_IR68a | 27 | 3 | 5 | 9 | 44 | 21 | 1 | | | | | | |
| | IR334 | 68 | 6 | 32 | 7 | 113 | 4 | | | | | | | |
| | IR336 | 80 | 30 | 55 | 25 | 190 | 36 | 48 | | | | | | |
| | IR337 | | 6 | 5 | 16 | 27 | | | | | | | | |
| | IR40a | | | | | | 8 | 3 | | | | | | |
| | IR75a | | 1 | | | 1 | | 7 | | | | | | |
| | IR76a_IR41a | 1 | | | | 1 | | 4 | | | | | | |
| | IR76b | 9 | 2 | 3 | | 14 | 9 | 2 | | | | | | |
| | IR93a | 40 | 3 | 6 | 10 | 59 | 6 | 6 | | | | | | |

| Family | Cluster in trees | Copepoda | | | | Copep | Crust | Arthr | Ecdys | Lopho | Cepha | Chord | Ambul | Cnidar |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Calan | Cyclo | Harpa | Sipho | | | | | | | | | |
| Cys-loop family: Acetylcholine and 5HT receptor | 5HTR_A-E | | | | | | | | | | | 7 | | |
| | 5HTR-like | 12 | | | | 12 | | | | 104 | | | | |
| | AChR* | 284 | 40 | 51 | 63 | 438 | 55 | 30 | 8 | 16 | 37 | | 72 | 50 |
| | AChR_alpha_1-6 | | | | | | | | | | 7 | 15 | | |
| | AChR_alpha_1-like | 19 | 4 | 6 | 9 | 38 | 4 | 5 | | | | | | |
| | AChR_alpha_2-like | 10 | 3 | 7 | 6 | 26 | 6 | 6 | | | | | | |
| | AChR_alpha_7 | 113 | 24 | 27 | 30 | 194 | 12 | 12 | 13 | 3 | 1 | 4 | 2 | |
| | AChR_alpha_9-10 | | | | | | | | | | 89 | 4 | 1 | |
| | AChR_beta_1-like | 17 | 5 | 7 | 7 | 36 | 5 | 6 | 7 | 2 | | | | |
| | AChR_beta_2,4_delta_ epsilon_gamma | | | | | | | | | | 11 | 13 | | |
| | AChR_beta_2-like | 28 | 9 | 3 | 6 | 46 | 5 | 6 | | | | | | |
| | Anion-selective LnAChR B-I-F-K | 7 | | | | 7 | | | | 18 | | | | |
| | Cation-selective LnAChR C | | | | | | | | | 5 | | | | |
| | Cation-selective LnAChR D | 15 | 5 | 4 | 5 | 29 | 3 | 4 | 1 | 11 | | | | |
| | Cation-selective LnAChR D-G | 2 | | | | 2 | | | | 2 | | | | |
| | Cation-selective LnAChR E | 3 | | | | 3 | | | 5 | 3 | | | | |
| | Cation-selective LnAChR G | 1 | | | | 1 | | | | 9 | | | | |
| | Cation-selective LnAChR H | | | | | | | | 3 | 10 | | | | |
| | Cation-selective LnAChR J | | | | | | | | | 3 | | | | |
| | des-2_acr-23_deg-3_acr-5 | | | | | | | | 13 | | | | | |
| | PBO_5-6 | | | | | | | | 19 | | | | | |
| | unc-29_lev-1_acr-2-2 | | | | | | | | 3 | | | | | |
| | unc-29_lev-1_acr-2-3 | | | | | | | | 1 | | | | | |
| Cys-loop family: GABA and Glycine channel | Anionic_ACC/Monoamine-gated_channel | | | | | | | | 16 | | | | | |
| | Anionic_glutamate | 151 | 30 | 28 | 37 | 246 | 15 | 23 | 8 | | | | | |
| | Cys_loop* | | | | | | 3 | 1 | | 1 | | | | |
| | GABA | 14 | 6 | 2 | 1 | 23 | | | | | 7 | | | 42 |
| | GABA_alpha_gama | 99 | 23 | 17 | 23 | 162 | 12 | 11 | 4 | 11 | 1 | 20 | | |
| | GABA_beta_theta | 18 | 5 | 6 | 8 | 37 | 5 | 6 | 3 | 5 | 1 | 7 | 1 | |
| | GABA_EXP_1 | | | | | | | | 2 | | | | | |
| | GABA_pi_delta | | | | | | | | | | 19 | 5 | | |
| | GABA_RDL | 97 | 30 | 29 | 9 | 165 | 11 | 19 | 1 | | | | | |
| | GABA_rho | | | | | | | | | | | 6 | | |
| | GABA_UNC-49B | | | | | | | | 2 | | | | | |
| | GlyR-like | 10 | | | | 10 | | | | 22 | 10 | | 43 | |
| | GlyR_alpha | | | | | | | | | | 1 | 8 | | |
| | GlyR_beta | | | | | | | | | | 5 | 2 | | |
| | Histamine-gated chloride channel_alpha_1 | 195 | 39 | 62 | 53 | 349 | 40 | 38 | | | | | | 6 |
| | Igc-57_GRR | 32 | 11 | 16 | 13 | 72 | 15 | 15 | 11 | | | | | |
| | pH sensitive chloride channel 2 | 11 | | 4 | | 15 | 6 | 7 | | | 28 | | | |
| | pH sensitive chloride channel 1 | 27 | 2 | 3 | 5 | 37 | 1 | 9 | 6 | | | | | |