**Table 1. Site, taxon, and sampling details for all *H. klunzingeri* examined in this study.** DD = Australian Drainage Division; RB = River Basin. NSample sizes are shown for each molecular dataset (ALZ = allozymes).

| **Site** | **Taxon** | **Site code** | **DD/RB** | **Region** | **Locality** | **State** | **Latitude** | **Longitude** | **SNPN** | **ALZN** | **CYTBN** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | KE | PU1554 | I/10 | Barron | Groves Ck | Qld | -16.8695 | 145.5991 | 2 |  | 2 |
| 2 | KN | PU1535 | I/20 | Burdekin | Dalrymple Dam | Qld | -20.6315 | 147.1333 | 5 | 5 | 2 |
| 3 | KN | PU0152 | I/30 | Fitzroy | Vandyke Ck | Qld | -24.1636 | 147.8025 | 2 | 3 | 8 |
| 4 | KN | PU1436 | I/30 | Fitzroy | Fairbairn Dam | Qld | -23.6572 | 148.0749 |  | 4 |  |
| 5 | KN | PU0154 | I/30 | Fitzroy | Mackenzie R | Qld | -23.3750 | 148.8420 | 2 | 2 | 4 |
| 6 | KN | PU1202 | I/30 | Fitzroy | Dawson R | Qld | -25.5744 | 149.8622 | 1 | 2 | 2 |
| 7 | KN | PU1203 | I/30 | Fitzroy | Dawson R | Qld | -25.1869 | 150.1889 | 1 | 2 | 2 |
| 8 | KN | Theo | I/30 | Fitzroy | Dawson R | Qld | -24.9372 | 150.0664 | 2 | 2 | 1 |
| 9 | KN | PU1518 | I/33 | Boyne | Awoonga Dam | Qld | -24.0670 | 151.2932 | 2 |  | 2 |
| 10 | KE | PU0250 | I/34 | Baffle | Baffle Ck | Qld | -24.3564 | 151.6119 | 2 | 4 | 4 |
| 11 | KE | PU1214, PU0242 | I/34 | Baffle | Oyster Ck | Qld | -24.2963 | 151.7793 | 2 | 1 | 5 |
| 12 | KE | PU9958 | I/36 | Burnett | Three Moon Ck | Qld | -24.9669 | 151.1208 | 2 | 4 | 7 |
| 13 | KE | PU0251 | I/36 | Burnett | Burnett R | Qld | -25.2825 | 151.1398 | 2 |  | 2 |
| 14 | KE | PU1446 | I/36 | Burnett | Auburn R | Qld | -25.7805 | 150.8188 | 2 | 4 | 2 |
| 15 | KE | PU1441 | I/36 | Burnett | Boyne R | Qld | -26.4808 | 151.4376 | 2 | 2 | 1 |
| 16 | KE | PU1442 | I/36 | Burnett | Barkers Ck | Qld | -26.7388 | 151.8101 | 2 | 4 | 2 |
| 17 | KE | PU1444 | I/36 | Burnett | Reedy Ck | Qld | -26.4313 | 151.6825 | 2 | 2 | 2 |
| 18 | KE | PU9955 | I/36 | Burnett | Burnett R | Qld | -25.3989 | 151.7772 | 2 | 5 | 3 |
| 19 | KE | PU9751, PU0238 | I/37 | Burrum | Elliott R | Qld | -24.9872 | 152.3797 | 1 | 2 | 5 |
| 20 | KE | PU0237 | I/37 | Burrum | Gregory R | Qld | -25.1517 | 152.3719 | 2 | 2 | 4 |
| 21 | KE | PU0236 | I/37 | Burrum | Lenthall Dam | Qld | -25.4333 | 152.5333 | 2 | 1 | 3 |
| 22 | KE | PU0231 | I/38 | Mary | Baroon Dam | Qld | -26.7058 | 152.8803 | 2 | 3 | 5 |
| 23 | KE | PU9954 | I/38 | Mary | Yabba Ck | Qld | -26.4592 | 152.6619 | 2 | 7 | 4 |
| 24 | KE | PU09114 | I/38 | Mary | Mary R | Qld | -26.3335 | 152.7043 | 2 | 2 |  |
| 25 | KE | PU09100 | I/41 | Maroochy | Wappa Dam | Qld | -26.5714 | 152.9214 | 2 | 2 |  |
| 26 | KE | PU09101 | I/41 | Maroochy | Maroochy R | Qld | -26.5604 | 152.9438 | 2 |  | 2 |
| 27 | KE | PU09104 | I/41 | Maroochy | Ewen Maddock Dam | Qld | -26.7791 | 153.0089 | 1 | 3 |  |
| 28 | KE | PU0996 | I/42 | Pine | Caboolture R | Qld | -27.0976 | 152.9137 | 2 | 2 |  |
| 29 | KE | PU0987 | I/42 | Pine | Laceys Ck | Qld | -27.1791 | 152.7841 | 2 |  | 2 |
| 30 | KE | PU0988 | I/42 | Pine | North Pine R | Qld | -27.2736 | 152.9794 | 2 |  | 1 |
| 31 | KE | PU9951 | I/43 | Brisbane | Back Ck | Qld | -26.9875 | 151.8289 | 2 | 8 | 9 |
| 32 | KE | PU0990 | I/43 | Brisbane | Esk Ck | Qld | -27.2255 | 152.4281 | 2 |  | 1 |
| 33 | KE | PU0993 | I/43 | Brisbane | Brisbane R | Qld | -27.4368 | 152.6336 | 1 | 2 | 2 |
| 34 | KE | PU9745 | I/43 | Brisbane | Lake Moogerah | Qld | -28.0533 | 152.5400 | 1 | 6 | 4 |
| 35 | KE | PU0228, Lmar | I/45 | Albert-Logan | Lake Maroon | Qld | -28.1800 | 152.6500 | 2 | 6 | 4 |
| 36 | KE | PU0979 | I/45 | Albert-Logan | Logan R | Qld | -27.8191 | 153.0044 | 2 | 4 | 2 |
| 37 | KE | PU0225, PU0224 | I/46 | South Coast | Coomera R | Qld | -28.0983 | 153.1456 | 2 | 2 | 2 |
| 38 | KE | PU0968 | I/46 | South Coast | Coomera R | Qld | -27.8980 | 153.2923 |  | 3 |  |
| 39 | KE | PU0222 | II/1 | Tweed | Oxley R | NSW | -28.3539 | 153.3040 | 2 | 1 | 2 |
| 40 | KE | PU9942 | II/3 | Richmond | Richmond R | NSW | -28.8700 | 153.0442 | 2 | 5 | 2 |
| 41 | KS | PU14144 | II/4 | Clarence | Maryvale R | NSW | -28.5093 | 152.1534 | 2 |  | 1 |
| 42 | KE | PU14143 | II/4 | Clarence | Maryvale R | NSW | -28.6335 | 152.2861 | 2 |  | 2 |
| 43 | KE | PU14145 | II/4 | Clarence | Tooloom Ck | NSW | -28.5197 | 152.4713 | 2 | 2 | 2 |
| 44 | KE | PU9943 | II/4 | Clarence | Clarence R | NSW | -28.8875 | 152.5642 | 2 | 3 | 4 |
| 45 | KE | PU14148 | II/4 | Clarence | Clarence R | NSW | -29.0420 | 152.5766 | 2 |  | 2 |
| 46 | KE | PU14160 | II/4 | Clarence | Mann R | NSW | -29.6936 | 152.1086 | 2 | 2 | 2 |
| 47 | KE | PU1452 | II/4 | Clarence | Mann R | NSW | -29.5775 | 152.5557 | 2 |  | 2 |
| 48 | KE | PU14153 | II/4 | Clarence | Nymboida R | NSW | -29.9516 | 152.7258 | 2 | 2 | 2 |
| 49 | KS | TR01-343B, Sali | II/6 | Macleay | Salisbury Waters | NSW | -30.7247 | 151.5131 | 4 | 2 | 4 |
| 50 | KS | PU1673 | II/10 | Hunter | Krui R | NSW | -32.0964 | 150.1183 | 2 |  | 2 |
| 51 | KS | PU1417 | II/10 | Hunter | Wybong Ck | NSW | -32.2692 | 150.6381 | 2 | 2 | 4 |
| 52 | KS | PU1345A | II/15 | Shoalhaven | Shoalhaven R | NSW | -35.3427 | 149.7381 | 5 |  | 5 |
| 53 | KEm | PU1412 | IV/22 | MDB:Condamine | Condamine R | Qld | -28.3231 | 152.3418 | 2 |  | 2 |
| 54 | KEm | PU1414 | IV/22 | MDB:Condamine | Leslie Dam | Qld | -28.2248 | 151.9212 |  | 1 |  |
| 55 | KEm | PU1440 | IV/22 | MDB:Condamine | Charleys Ck | Qld | -26.6840 | 150.8007 | 2 | 2 | 2 |
| 56 | KEm | PU9960, PU1438 | IV/22 | MDB:Condamine | Maranoa R | Qld | -26.4869 | 147.9733 | 2 | 7 | 6 |
| 57 | KEm | PU14138 | IV/22 | MDB:Condamine | Balonne R | Qld | -27.9105 | 148.6488 |  | 3 |  |
| 58 | KEm | PU14139 | IV/22 | MDB:Condamine | Balonne R | Qld | -28.3303 | 148.3873 | 2 | 2 |  |
| 59 | KS | PU9949, Seve | IV/16 | MDB:Border | Severn R | Qld | -28.7400 | 151.8736 | 2 | 4 | 5 |
| 60 | KS | PU1459 | IV/16 | MDB:Border | Severn R | NSW | -29.4690 | 151.4820 | 2 |  | 2 |
| 61 | KS | PU1332 | IV/16 | MDB:Border | McIntyre R | NSW | -29.7812 | 151.1173 | 2 |  | 2 |
| 62 | KS | PU1334 | IV/16 | MDB:Border | McIntyre R | NSW | -28.5472 | 150.2527 | 2 | 2 | 2 |
| 63 | KS | PU1637 | IV/16 | MDB:Border | Boomi R | NSW | -29.0217 | 149.0641 | 1 |  | 1 |
| 64 | KS | PU1328 | IV/18 | MDB:Gwydir | Gwydir R | NSW | -29.4570 | 150.0821 | 2 |  | 2 |
| 65 | KS | PU1330 | IV/19 | MDB:Namoi | Manilla R | NSW | -30.3723 | 150.6087 | 1 |  | 1 |
| 66 | KSxKE | PU1336 | IV/20 | MDB:Castlereagh | Castlereagh R | NSW | -31.8186 | 149.1172 | 1 |  | 1 |
| 67 | KS | PU9970 | IV/21 | MDB:Macquarie | Dunns Swamp | NSW | -32.8344 | 150.2064 | 2 | 6 | 4 |
| 68 | KS | PU0254 | IV/21 | MDB:Macquarie | Turon R | NSW | -33.0725 | 149.4061 | 1 | 1 | 4 |
| 69 | KSxKE | PU14122 | IV/21 | MDB:Bogan | Bogan R | NSW | -32.7226 | 148.1275 | 1 |  | 1 |
| 70 | KSxKE | Bog | IV/21 | MDB:Bogan | Bogan R | NSW | -31.5572 | 147.1852 |  | 2 |  |
| 71 | KEm | PU1325, PU1421 | IV/25 | MDB:Darling | Darling R | NSW | -30.0870 | 145.8930 | 1 | 1 | 2 |
| 72 | KWm | PU1431 | IV/23 | MDB:Warrego | Nive R | Qld | -24.9182 | 146.5549 | 2 | 2 | 2 |
| 73 | KWm | Nive | IV/23 | MDB:Warrego | Nive R | QLD | -25.1800 | 146.5000 |  | 5 |  |
| 74 | KWm | PU1503 | IV/23 | MDB:Warrego | Warrego R | QLD | -26.0820 | 146.4203 | 2 | 3 |  |
| 75 | KWm | Walk | IV/23 | MDB:Warrego | Walker Ck | QLD | -25.8380 | 145.6550 |  | 1 |  |
| 76 | KWm | PU97105 | IV/23 | MDB:Warrego | Ambathala Ck | Qld | -26.0130 | 145.3400 | 2 | 7 | 4 |
| 77 | KWm | PU9963 | IV/23 | MDB:Warrego | Warrego R | Qld | -28.1181 | 145.6867 | 2 | 6 | 4 |
| 78 | KWm | PU9961 | IV/24 | MDB:Paroo | Paroo R | Qld | -26.6514 | 145.2819 | 2 | 3 | 4 |
| 79 | KSxKE | PU1317 | IV/25 | MDB:Darling | Darling R | NSW | -31.5680 | 143.3978 | 1 | 1 | 1 |
| 80 | KS | PU1303 | IV/12 | MDB:Lachlan | Meadow Ck | NSW | -34.7789 | 149.2686 | 2 | 2 | 2 |
| 81 | KS | PU1304, PU1305 | IV/12 | MDB:Lachlan | Blakney Ck | NSW | -34.5861 | 149.1333 |  | 2 |  |
| 82 | KS | PU1482 | IV/10 | MDB:Murrumbidgee | Murrumbidgee R | ACT | -35.2422 | 148.9517 | 5 |  | 5 |
| 83 | KS | PU1302 | IV/10 | MDB:Murrumbidgee | Yass R | NSW | -34.8385 | 148.9086 | 2 | 2 | 2 |
| 84 | KS | PU1309 | IV/10 | MDB:Murrumbidgee | Killimicat Ck | NSW | -35.1882 | 148.2286 | 2 | 2 | 2 |
| 85 | KS | PU1341A | IV/10 | MDB:Murrumbidgee | Murrumbidgee R | NSW | -35.1048 | 147.3759 | 2 |  | 2 |
| 86 | KS | PU1338A | IV/10 | MDB:Murrumbidgee | Murrumbidgee R | NSW | -34.5259 | 144.7119 | 1 |  | 1 |
| 87 | KS | PU1340A | IV/10 | MDB:Murrumbidgee | Murrumbidgee R | NSW | -34.6656 | 143.4914 | 1 |  | 1 |
| 88 | KS | PU1338B | IV/1 | MDB:Upper Murray | Murray R | NSW | -36.0375 | 147.9729 | 2 |  | 2 |
| 89 | KS | PU1592 | IV/2 | MDB:Kiewa | Bight Ck | Vic | -36.3733 | 147.0628 | 2 | 2 |  |
| 90 | KS | PU0821 | IV/9 | MDB:Mid Murray | Wodonga Ck | Vic | -36.1099 | 146.8914 |  | 3 |  |
| 91 | KS | PU1360 | IV/3 | MDB:Ovens | Ovens R | Vic | -36.4132 | 146.4556 | 2 |  | 2 |
| 92 | KS | PU0822 | IV/9 | MDB:Mid Murray | Ulupna Ck | Vic | -35.8481 | 145.4116 | 2 |  | 2 |
| 93 | KS | PU1361 | IV/4 | MDB:Broken | Broken R | Vic | -36.4330 | 145.6840 | 2 | 2 | 2 |
| 94 | KS | PU1362 | IV/5 | MDB:Goulburn | Goulburn R | Vic | -36.3783 | 145.3969 | 2 |  | 2 |
| 95 | KS | PU1479 | IV/7 | MDB:Lodden | Loddon R | Vic | -36.7409 | 143.9011 | 2 |  | 2 |
| 96 | KS | PU1385, PU17115 | IV/7 | MDB:Lodden | Loddon R | Vic | -36.4458 | 143.9666 | 2 |  | 2,5\* |
| 97 | KS | PU9437 | IV/9 | MDB:Mid Murray | Murray R | Vic | -35.9261 | 144.4375 | 1 | 3 | 3 |
| 98 | KS | PU9436 | IV/9 | MDB:Mid Murray | Black Swamp | Vic | -35.7194 | 144.1875 |  | 2 | 7 |
| 99 | KS | PU0824 | IV/9 | MDB:Mid Murray | Little Murray R | Vic | -35.3442 | 143.5647 | 2 | 2 |  |
| 100 | KS | PU17106 | IV/9 | MDB:Mid Murray | Murray R | Vic | -34.5803 | 142.7451 |  |  | 3\* |
| 101 | KS | PU0825 | IV/14 | MDB:Lower Murray | Kings Billabong | Vic | -34.2409 | 142.2200 | 2 |  | 2 |
| 102 | KSxKE | PU0826 | IV/14 | MDB:Lower Murray | Lake Cullulleraine | Vic | -34.2758 | 141.6007 | 2 |  | 2 |
| 103 | KSxKE | Lind | IV/14 | MDB:Lower Murray | Murray R | Vic | -34.1700 | 141.1900 | 2 | 3 | 1 |
| 104 | KSxKE | PU17107 | IV/26 | MDB:Lower Murray | Murray R | SA | -34.2874 | 140.6105 |  |  | 14\* |
| 105 | KSxKE | Yabb | IV/26 | MDB:Lower Murray | Murray R | SA | -34.4333 | 140.5500 | 1 |  | 1 |
| 106 | KSxKE | Over | IV/26 | MDB:Lower Murray | Murray R | SA | -34.1500 | 140.3300 | 3 |  | 2 |
| 107 | KSxKE | Devl | IV/26 | MDB:Lower Murray | Murray R | SA | -34.1500 | 140.1667 | 3 |  | 1 |
| 108 | KSxKE | Morg | IV/26 | MDB:Lower Murray | Murray R | SA | -34.0377 | 139.6813 |  | 1 |  |
| 109 | KSxKE | PU0830 | IV/26 | MDB:Lower Murray | Murray R | SA | -35.1529 | 139.3150 | 2 | 2 | 1 |
| 110 | KSxKE | PU17114 | IV/26 | MDB:Lower Murray | Murray R | SA | -35.2414 | 139.4390 |  |  | 4\* |
| 111 | KW | PU1426 | XI/1 | Bulloo | Bulloo R | Qld | -26.3842 | 144.2985 | 2 | 2 | 2 |
| 112 | KW | PU9962 | XI/1 | Bulloo | Bulloo R | Qld | -26.6178 | 144.2783 | 2 | 7 | 9 |
| 113 | KW | PU1425 | XI/1 | Bulloo | Bulloo R | Qld | -27.7676 | 143.9372 | 2 |  | 2 |
| 114 | KW | Bull | XI/1 | Bulloo | Bulloo R | Qld | -28.0000 | 143.8300 | 1 | 1 | 1 |
| 115 | KW | PU97103 | X/3 | Cooper | Barcoo R | Qld | -24.8786 | 146.2567 | 1 | 8 | 6 |
| 116 | KW | Darr | X/3 | Cooper | Darr R | Qld | -23.4000 | 144.2200 | 1 | 1 | 2 |
| 117 | KW | PU1427 | X/3 | Cooper | Cooper Ck | Qld | -25.3700 | 142.7446 | 2 | 1 | 2 |
| 118 | KW | PU1428 | X/3 | Cooper | Kyabra Ck | Qld | -26.0974 | 143.4445 | 2 | 2 |  |
| 119 | KW | Coon | X/3 | Cooper | Brown Ck | SA | -27.1609 | 140.1638 | 1 | 3 | 3 |
| 120 | KW | Nari | X/3 | Cooper | Cooper Ck | SA | -27.4589 | 140.0758 | 2 | 1 | 2 |
|  |  |  |  |  |  |  |  |  | 204 | 233 | 293 |