**Supplementary Table A.** List of retrieved sequences of *Squalus* species from public databases and relative BOLD/NCBI Process ID and FAO Division.

|  |  |  |
| --- | --- | --- |
| BOLD/NCBI Code | Species | FAO Division |
| ELAME211-09|GU805601|S000022 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME235-09|GU805582|S000046 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME237-09|GU805580|S000048 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME238-09|HQ946204|S000049 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME239-09|GU805578|S000050  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME240-09|GU805579|S000051  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME241-09|GU805576|S000052  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME242-09|GU805577|S000053  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME251-09|GU805566|S000062  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME252-09|GU805567|S000063  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME255-09|GU805563|S000066  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME256-09|GU805564|S000067  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME257-09|GU805561|S000068  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME258-09|GU805562|S000069  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME259-09|GU805559|S000070  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME260-09|GU805560|S000071  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME263-09|GU805555|S000074  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME265-09|GU805553|S000076  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME266-09|GU805554|S000077  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME268-09|GU805552|S000079  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME269-09|GU805549|S000080  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME271-09|GU805547|S000082  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME273-09|GU805548|S000084  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME274-09|GU805545|S000085  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME275-09|GU805546|S000086  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME276-09|GU805543|S000087  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME277-09|GU805544|S000088  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME279-09|GU805542|S000090  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME280-09|GU805540|S000091  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME291-09|GU805535|S000102  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME292-09|GU805533|S000103  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME302-09|GU805525|S000113  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME303-09|GU805526|S000114  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME304-09|GU805523|S000115  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME311-09|GU805519|S000122  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME315-09|GU805515|S000126  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME317-09|GU805516|S000128  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME318-09|GU805513|S000129  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME319-09|GU805514|S000130  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME358-09|GU805473|S000174  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME359-09|GU805474|S000175  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME360-09|GU805471|S000176  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME361-09|GU805472|S000177  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME362-09|GU805469|S000178  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME363-09|GU805470|S000179  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME364-09|GU805468|S000180  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME366-09|GU805466|S000182  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME368-09|GU805467|S000184  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME369-09|GU805464|S000185  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME370-09|GU805465|S000186  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME371-09|GU805462|S000187  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME372-09|GU805463|S000188  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME373-09|GU805460|S000189  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME374-09|GU805461|S000190  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME375-09|GU805458|S000191  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME376-09|GU805459|S000192  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME377-09|GU805456|S000193  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME378-09|GU805457|S000194  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME379-09|GU805371|S000195  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME380-09|GU805372|S000196  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME381-09|GU805369|S000197  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME382-09|GU805370|S000198  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME384-09|GU805367|S000200  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME385-09|GU805368|S000201  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME386-09|GU805365|S000203  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME387-09|GU805366|S000204  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME388-09|GU805363|S000206  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME389-09|GU805364|S000209  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME391-09|GU805361|S000212  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME393-09|GU805362|S000214  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME394-09|GU805359|S000215  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME395-09|GU805360|S000216  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME396-09|GU805357|S000219  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME398-09|GU805355|S000221  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME399-09|GU805356|S000223  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME400-09|GU805353|S000224  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME401-09|GU805354|S000225  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME402-09|GU805351|S000226  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME403-09|GU805352|S000227  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME404-09|GU805349|S000228  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME405-09|GU805350|S000229  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME406-09|GU805347|S000230  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME407-09|GU805348|S000231  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME408-09|GU805345|S000232  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME409-09|GU805346|S000233  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME410-09|GU805343|S000234  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME411-09|GU805344|S000235  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME412-09|GU805341|S000236  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME413-09|GU805342|S000237  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME414-09|GU805339|S000238  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME415-09|GU805340|S000239  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME416-09|GU805337|S000240  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME417-09|GU805338|S000241  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME418-09|GU805335|S000242  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME419-09|GU805336|S000243  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME420-09|GU805333|S000244  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME421-09|GU805334|S000245  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME422-09|GU805331|S000246  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME424-09|GU805332|S000248  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME425-09|GU805329|S000249  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME426-09|GU805330|S000250  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME427-09|GU805327|S000251  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME428-09|GU805328|S000252  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME429-09|GU805325|S000253  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME431-09|GU805326|S000255 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME432-09|GU805323|S000256 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME433-09|GU805324|S000257 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME435-09|GU805321|S000259 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME436-09|GU805322|S000260 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME437-09|GU805319|S000261 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME438-09|GU805320|S000262 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME439-09|GU805317|S000263 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME440-09|GU805318|S000264 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME441-09|GU805315|S000265 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME442-09|GU805316|S000266 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME443-09|GU805313|S000267 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME444-09|GU805314|S000268 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME445-09|GU805311|S000269 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME446-09|GU805312|S000270 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME447-09|GU805309|S000271 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME448-09|GU805310|S000272 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME449-09|GU805307|S000273 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME450-09|GU805308|S000274 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME451-09|GU805305|S000275 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME452-09|GU805306|S000276 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME453-09|GU805303|S000277 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME454-09|GU805304|S000278 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME455-09|GU805301|S000279 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME457-09|GU805302|S000281 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME458-09|GU805299|S000282 | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME459-09|GU805300|S000283  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME460-09|GU805297|S000284  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME461-09|GU805298|S000285  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME462-09|GU805295|S000286  | *Squalus acanthias* | Adriatic (Division 37.2.1) |
| ELAME1194-11|GenMaPDB000680 | *Squalus blainville* | Sardinia (Division 37.1.3) |
| ELAME1195-11|GenMaPDB000681 | *Squalus blainville* | Sardinia (Division 37.1.3) |
| ELAME1196-11|GenMaPDB000682 | *Squalus blainville* | Sardinia (Division 37.1.3) |
| ELAME1197-11|GenMaPDB000683 | *Squalus blainville* | Sardinia (Division 37.1.3) |
| ELAME1198-11|GenMaPDB000684 | *Squalus blainville* | Sardinia (Division 37.1.3) |
| ELAME586-09|GU805862|1G08D13SBL | *Squalus blainville* | Sardinia (Division 37.1.3) |
| ELAME587-09|GU805859|2G08D13SBL | *Squalus blainville* | Sardinia (Division 37.1.3) |
| ELAME588-09|GU805860|3G08D13SBL | *Squalus blainville* | Sardinia (Division 37.1.3) |
| ELAME589-09|GU805857|4G08D13SBL | *Squalus blainville* | Sardinia (Division 37.1.3) |
| ELAME590-09|GU805858|5G08D13SBL | *Squalus blainville* | Sardinia (Division 37.1.3) |
| gi|668349379|gb|KJ709923.1 | *Squalus blainville* | Ionian (Division 37.2.2) |
| gi|668349381|gb|KJ709924.1 | *Squalus blainville* | Ionian (Division 37.2.2) |
| gi|668349383|gb|KJ709925.1 | *Squalus blainville* | Ionian (Division 37.2.2) |
| gi|668349385|gb|KJ709926.1 | *Squalus blainville* | Ionian (Division 37.2.2) |
| gi|674653008|gb|KJ709641.1 | *Squalus blainville* | Ionian (Division 37.2.2) |
| ELAME521-09|GU805907|AN012LOBRPA | *Squalus blainville* | Ionian (Division 37.2.2) |
| ELAME522-09|GU805904|AN013LOBRPA | *Squalus blainville* | Ionian (Division 37.2.2) |
| ELAME523-09|GU805905|AN014LOBRPA | *Squalus blainville* | Ionian (Division 37.2.2) |
| ELAME524-09|GU805902|AN015LOBRPA | *Squalus blainville* | Ionian (Division 37.2.2) |
| ELAME484-09|GU805924|CY-09-003 | *Squalus blainville* |  Levant (Division 37.3.2) |
| ELAME505-09|GU805916|CY-09-024 | *Squalus blainville* |  Levant (Division 37.3.2) |
| ELAME508-09|GU805917|CY-09-031 | *Squalus blainville* |  Levant (Division 37.3.2) |
| ELAME509-09|GU805914|CY-09-032 | *Squalus blainville* |  Levant (Division 37.3.2) |
| ELAME510-09|GU805915|CY-09-033 | *Squalus blainville* |  Levant (Division 37.3.2) |
| gi|145315969|gb|EF539318.1 | *Squalus megalops* | Southern Australia Subarea 57.6) |
| gi|166837719|gb|EU399029.1 | *Squalus megalops* | Southern Australia (Subarea 57.6) |
| gi|166837721|gb|EU399030.1 | *Squalus megalops* | Southern Australia (Subarea 57.6) |
| gi|166837723|gb|EU399031.1 | *Squalus megalops* | Southern Australia (Subarea 57.6) |
| gi|166837725|gb|EU399032.1 | *Squalus megalops* | Southern Australia (Subarea 57.6) |
| gi|70724030|gb|DQ108268.1 | *Squalus megalops* | Southwest Australia (Division 57.5.2) |
| gi|70724032|gb|DQ108269.1 | *Squalus megalops* | Southwest Australia (Division 57.5.2) |
| gi|70724034|gb|DQ108270.1 | *Squalus megalops* | Southwest Australia (Division 57.5.2) |
| gi|70724036|gb|DQ108271.1 | *Squalus megalops* | Southwest Australia (Division 57.5.2) |