**Production of L-asparaginase and L-glutaminase anticancer enzymes using filamentous fungi**

**Table S1.** Fungal genera and species given with their AUMC accession numbers alongside with sources of isolation

| **Fungal species** | **AUMC No.** | **Source** |
| --- | --- | --- |
| ***Aspergillus*** |  |  |
| *A. brasiliensis* | 1954 | Pear fruit |
| *A. carneus* | 47 | Soil, Assiut, Egypt |
| *A. carneus* | 983 | Soil, Alexandria, Egypt |
| *A. carneus* | 10502 | Animal manure Bein-Suef |
| *A. carneus* | 13007 | Unknown source |
| *A. flavipes* | 179 | Soil, Assiut, Egypt |
| *A. fumigatus* | 51 | Human nails, Egypt |
| *A. fumigatus* | 52 | Soil, Assiut, Egypt |
| *A. fumigatus* | 968 | Banana, Assiut, Egypt |
| *A. fumigatus* | 1872 | Air, Assiut, Egypt |
| *A. fumigatus* | 2448 | Soil, Aswan, Egypt |
| *A. fumigatus* | 10590 | Unknown source |
| *A. fumigatus* | 14444 | Onychomycosis |
| *A. fumigatus* | 14445 | Onychomycosis |
| *A. melleus* | 13374 | Unknown source |
| *A. niger* | 68 | Coconut, Kenya |
| *A. niger* | 963 | Soil of date palm roots, New Vally, Egypt |
| *A. niger* | 969 | Banana, Assiut, Egypt |
| *A. niger* | 993 | Soil, Alexandria, Egypt |
| *A. niger* | 1901 | Pear fruit |
| *A. niger* | 1902 | Pear fruit |
| *A. niger* | 1962 | Pear fruit |
| *A. niger* | 1972 | Pear fruit |
| *A. niger* | 2015 | Air, Assiut, Egypt |
| *A. niger* | 2454 | Soil, Aswan, Egypt |
| *A. niger* | 5538 | Wheat flour |
| *A. niger* | 5561 | Wheat flour |
| *A. niger* | 14401 | Rice grain |
| *A. niger* | 14403 | Rice grain |
| *A. niger* | 14794 | Unknown source |
| *A. niger* | 15131 | Onychomycosis |
| *A. niger* | 15836 | Unknown source |
| *A. niger* | 1954 | Pear fruit |
| *A. nidulans* | 5050 | Air, Assiut, Egypt |
| *A. nidulans* | 2039 | Soil, Assiut, Egypt |
| *A. nidulans* | 972 | Banana, Assiut, Egypt |
| *A. nidulans* | 8541 | Textil |
| *A. nidulans* | 11500 | Yogurt |
| *A. nidulans* | 11499 | White cheese |
| *A. nidulans* | 1063 | Solarized soil, Egypt |
| *A. nidulans* | 11497 | Cow milk |
| *A. nidulans* | 11501 | Old cheese |
| *A. nidulans* | 8540 | Textil |
| *A. nidulans* | 8538 | Textil |
| *A. nidulans* | 8543 | Textil |
| *A. nidulans* | 8544 | Textil |
| *A. nidulans* | 8536 | Textil |
| *A. nidulans* | 11444 | Unknown source |
| *A. nidulans* | 8541 | Textil |
| *A. nidulans* | 8533 | Textil |
| *A. nidulans* | 8539 | Textil |
| *A. nidulans* | 7147 | Textil |
| *A. nidulans* | 11446 | Unknown source |
| *A. ochraceus* | 7853 | Mud |
| *A. ochraceus* | 2337 | Used socke, Assiut |
| *A. ochraceus* | 14437 | Unknown source |
| *A. tamrrii* | 45 | Peanut, Uganda |
| *A. tamrrii* | 2002 | Cafytate Solm |
| *A. tamrrii* | 43 | Soil, Assiut, Egypt |
| *A. tamrrii* | 2366 | Cumin, Egypt |
| *A. terreus* | 10516 | Textil factory |
| *A. terreus* | 10503 | Animal manure Bein-Suef |
| *A. terreus* | 71 | Cardamom, Uganda |
| *A. terreus* | 72 | Soil, Assiut, Egypt |
| *A. terreus* | 70 | Soil, Assiut, Egypt |
| *A. terreus* | 2420 | Cattle, Saudi Arabia |
| *A. terreus* | 974 | Banana, Assiut, Egypt |
| *A. terreus* | 15176 | Atomic Energy Authority, Cairo |
| *A. terreus* | 6686 | Hospital air |
| ***Emericella*** |  |  |
| *E. sydowii* | 84 | Cerealaphide |
| *E. sydowii* | 5522 | Unknown source |
| *E. sydowii* | 13037 | Unknown source |
| ***Neosartorya*** |  |  |
| *N. clavata* | 23 | Soil, Assiut, Egypt |
| *N. clavata* | 24 | Soil, Assiut, Egypt |
| *N. clavata* | 25 | Soil, Assiut, Egypt |
| *N. clavata* | 27 | Soil, Assiut, Egypt |
| ***Penicillium*** |  |  |
| *P. aurantiogriseum* | 11529 | Guava fruit |
| *P. aurantiogriseum* | 7044 | Rice grains |
| *P. aurantiogriseum* | 13013 | Unknown source |
| *P. aurantiogriseum* | 7596 | Air |
| *P. aurantiogriseum* | 7510 | Air |
| *P. aurantiogriseum* | 7494 | Salted fish |
| *P. aurantiogriseum* | 7447 | Cow dung |
| *P. aurantiogriseum* | 513 | Sweet potatoes, Eygpt |
| *P. aurantiogriseum* | 7476 | Salted fish |
| *P. aurantiogriseum* | 1362 | Wheat aphid, Egypt |
| *P. aurantiogriseum* | 330 | Soil, Assiut, Egypt |
| *P. aurantiogriseum* | 331 | Soil, Assiut, Egypt |
| *P. aurantiogriseum* | 884 | Apple, Assiut, Egypt |
| *P. aurantiogriseum* | 332 | Soil, Assiut, Egypt |
| *P. brevicompactum* | 13014 | Unknown source |
| *P. brevicompactum* | 498 | Soil, Assiut, Egypt |
| *P. brevicompactum* | 7053 | Rice grains |
| *P. brevicompactum* | 10583 | Unknown source |
| *P. brevicompactum* | 528 | Cerealaphids |
| *P. brevicompactum* | 5028 | Soil, Assiut, Egypt |
| *P. brevicompactum* | 7525 | Air |
| *P. chrysogenum* | 3098 | Air, Assiut, Egypt |
| *P. chrysogenum* | 501 | Soil, Assiut, Egypt |
| *P. chrysogenum* | 509 | Air, Assiut, Egypt |
| *P. chrysogenum* | 11559 | Soil contaminated oil next to oil wells Sinai |
| *P. chrysogenum* | 11556 | Soil contaminated oil next to oil wells Sinai |
| *P. chrysogenum* | 589 | Water of train reservoir |
| *P. chrysogenum* | 1084 | Soil, Assiut, Egypt |
| *P. chrysogenum* | 7082 | Medical sample |
| *P. chrysogenum* | 588 | Water of train reservoir |
| *P. chrysogenum* | 1910 | Pear fruit |
| *P. chrysogenum* | 2415 | Cattle, Saudi Arabia |
| *P. chrysogenum* | 2050 | Air, Assiut, Egypt |
| *P. chrysogenum* | 2024 | Air, Assiut, Egypt |
| *P. chrysogenum* | 4033 | Air, Riyadh, Saudi Arabia |
| *P. chrysogenum* | 648 | Apple |
| *P. chrysogenum* | 5917 | Sorghum grain |
| *P. chrysogenum* | 7485 | Salted fish |
| *P. chrysogenum* | 6072 | Chicken flooring material, Fayum |
| *P. chrysogenum* | 6092 | Strawberry fruit, Assiut |
| *P. chrysogenum* | 9428 | Sesame |
| *P. chrysogenum* | 520 | Air, Assiut, Egypt |
| *P. chrysogenum* | 14554 | Lemon, Minia |
| *P. chrysogenum* | 13364 | Unknown source |
| *P. chrysogenum* | 507 | Sweet potatoes, Eygpt |
| *P. chrysogenum* | 9476 | Soil, Assiut, Egypt |
| *P. corylophilum* | 1975 | Sparrow faeces, Egypt |
| *P. corylophilum* | 7049 | Rice grains |
| *P. corylophilum* | 2516 | Tinea capities |
| *P. corylophilum* | 7448 | Horse dung |
| *P. griseofulvum* | 534 | Soil, Assiut, Egypt |
| *P. griseofulvum* | 535 | Soil, Assiut, Egypt |
| *P. griseofulvum* | 6913 | Culture collection room |
| *P. griseofulvum* | 503 | Soil, Assiut, Egypt |
| *P. griseofulvum* | 5905 | Sorghum grain |
| *P. solitum* | 13590 | Unknown source |
| *P. solitum* | 13593 | Unknown source |
| *P. solitum* | 13589 | Unknown source |
| *P. solitum* | 13594 | Unknown source |
| *P. solitum* | 13592 | Unknown source |
| *P. solitum* | 505 | Sweet potatoes, Egypt |
| *P. solitum* | 14755 | T3A pharmaceutical |
| *P. solitum* | 14887 | Onion, Minia |
| *P. solitum* | 15162 | Unknown source |
| *P. solitum* | 11566 | Soil contaminated oil next to oil wells Sinai |
| *P. solitum* | 13588 | Unknown source |
| *P. solitum* | 3411 | Basbosa Assiut, Egypt |
| *P. solitum* | 15156 | Unknown source |
| ***Beauveria*** |  |  |
| *B. bassiana* | 3572 | Air, Assiut, Egypt |
| *B. bassiana* | 3581 | Air, Assiut, Egypt |
| *B. bassiana* | 3857 | Galeria mellonella |
| *B. bassiana* | 3576 | Air, Assiut, Egypt |
| *B. bassiana* | 3563 | Air, Assiut, Egypt |
| *B. bassiana* | 3861 | Galeria mellonella |
| *B. bassiana* | 3864 | Galeria mellonella |
| *B. bassiana* | 3851 | Galeria mellonella |
| ***Cladosporium*** |  |  |
| *C. cladosporioides* | 4445 | Air, Riyadh, Saudi Arabia |
| *C. cladosporioides* | 11432 | Red sea fish |
| *C. cladosporioides* | 11433 | Red sea fish |
| *C. cladosporioides* | 6091 | Strawberry fruit, Assiut |
| *C. cladosporioides* | 7842 | Salted fish |
| *C. cladosporioides* | 8380 | Unknown source |
| *C. sphaerosperum* | 136 | Soil, Assiut, Egypt |
| *C. sphaerosperum* | 4440 | Air, Riyadh, Saudi Arabia |
| *C. sphaerosperum* | 11401 | Unknown source |
| *C. sphaerosperum* | 7035 | Air, Riyadh, KSA |
| *C. sphaerosperum* | 9098 | Sesame |
| *C. sphaerosperum* | 4448 | Air, Riyadh, Saudi Arabia |
| *C. sphaerosperum* | 10514 | Fish |
| *C. sphaerosperum* | 4449 | Air, Riyadh, Saudi Arabia |
| *C. sphaerosperum* | 7042 | Air, Assiut, Egypt |
| *C. sphaerosperum* | 4708 | Soil, Assiut, Egypt |
| *C. sphaerosperum* | 6342 | Flax seed |
| ***Scopuloriopsis*** |  |  |
| *S. brevicaulis* | 11560 | Unknown source |
| *S. brevicaulis* | 13025 | Soil, Assiut, Egypt |
| *S. brevicaulis* | 435 | Cattle, Saudi Arabia |
| *S. brevicaulis* | 2418 | Unknown source |
| *S. brevicaulis* | 13035 | Shoe varnish, Egypt |
| *S. brevicaulis* | 4069 | Unknown source |
| *S. brevicaulis* | 13036 | Soil, Kharga oasis |
| *S. brevicaulis* | 4813 | Unknown source |
| ***Talaromyces*** |  |  |
| *T. duclauxii* | 2507 | Soil of banana plantation, Egypt |
| *T. duclauxii* | 14746 | Unknown source |
| *T. duclauxii* | 14749 | Unknown source |
| *T. funiculosus* | 302 | Soil, Assiut, Egypt |
| *T. pinophilus* | 2365 | Human hair, Egypt |
| *T. purpureogenous* | 14799 | Unknown source |
| *T. purpureogenous* | 14726 | Yogurt |
| *T. purpureogenous* | 4451 | Coca cola drink |
| *T. purpureogenous* | 5374 | Cotton seed, Giza |
| *T. purpureogenous* | 336 | Soil, Assiut, Egypt |
| *T. purpureogenous* | 6343 | Fenugreek |
| ***Trichoderma*** *konigii* | 5413 | Soil, Lybia |
| **Total** | **189** |  |
| **No. of genera (9)** | **9** |  |
| **No. of species (27)** | **27** |  |