

Incompatibility factors analysis of *Pleurotus nebrodensis*

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Abstract: The incompatibility factors were analyzed by protoplast monokaryon mating for five cultivated strains and one wild strain of *Pleurotus nebrodensis*. The result shows that seven different A and ten different B factors were tested out in six strains of *P. nebrodensis* by mating among protoplasted monokaryons. The repeat frequency of A and B factor were 41.7% and 16.7%, respectively. The mating type of strain 00485 was A3A4B3B4, which had the same A factor and one identical B factor, B4 with strain 00488, one identical A and one identical B factor, A4 and B5 with strain 00487, respectively, and different A and B factor from strain 00486, 00489, 00491; The mating type of strain 00486 was A5A7B9B10, which had one identical A factor, A5 with strain 00487, and different A and B factor from strains 00488, 00489 and 00491; The mating type of strain 00487 was A4A5B4B5, which had one identical A factor, A4 with strain 00488, and different A and B factor from strains 00489 and 00491; The mating type of strain 00488 was A3A4B4B6, which had different A and B factor from strains 00489 and 00491; The mating type of strain 00489 was A1A2B1B2, which had one identical A factor, A1 and different B factor from strain 00491 (A1A6B7B8).

Key words: incompatibility factors, mating type, repeat frequency