



LIFE4FIR – Project LIFE18 NAT/IT/000164

“Decisive in situ and ex situ conservation strategies to secure the critically endangered Sicilian fir, *Abies nebrodensis*”

Report: List of the seedlings growing in nursery indicating their genetic origin (A1.2, C2.2)

 Istituto per la Protezione Sostenibile delle Piante
Consiglio Nazionale delle Ricerche 

 Consiglio Nazionale delle Ricerche
Istituto per la BioEconomia
Dipartimento di Scienze Bio Agroalimentari

REPUBBLICA ITALIANA

REGIONE SICILIANA
ASSESSORATO REGIONALE
DELL'AGRICOLTURA, DELLO SVILUPPO RURALE
E DELLA PESCA MEDITERRANEA


Parco delle Madonie


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UNIVERSIDAD DE SEVILLA


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1. GENERAL AIMS OF THE ACTION

In this action of the project, we are intended to genetically characterize a total of 2064 young individuals of *Abies nebrodensis* from the local nursery Piano Noce. These plants represent the first selection step of plants to be used for reforestation, thus it is important to disentangle their genetic origin to differentiate pure *A. nebrodensis* seedlings from putative hybrids with other alien fir species.

2. METHODS

Following the same procedure described for the action A.1.1, we extracted the DNA and then used SNPs genotyping through PCR-based OpenArrays technology to get the genotypes of all sampled seedlings. Then, paternity tests using the COLONY software v.2.0.6.6 were carried out on the seedling genotypes to determine the outcrossing (cross between unrelated individuals), inbreeding and self-fertilization and to assess the rate of introgression (eventual hybridization) due to fertilization of female cones with pollen coming from alien firs (namely, *Abies alba* and *A. cephalonica*).

3. MAIN RESULTS

3.1. Genetic purity of *Abies nebrodensis* seedlings

We used 100 highly informative SNPs to genetically characterize a total of 1776 of the 2064 seedlings (86.05%; Table 5) that were sampled from the nursery. We could not obtain the genotypes for the remaining 288 young individuals due to the low DNA purity and/or concentrations during the extractions of these individuals. Of the 1776 genotyped seedlings, 1525 individuals (85.87%) were assigned to one or more compatible candidate parents with very strong support (probability of correct assignment = 100%). We inferred the origin (considering as such the identification of one or both parents) of 1242 seedlings: most of them (897) were found to be both parents assigned to some of the genotypes of *A. nebrodensis* adult-trees (i.e. both parents were *A. nebrodensis* plants; for the remaining 345 seedlings, only one of the parents were assigned to an *A. nebrodensis* genotype (i.e. they are putative hybrids with other fir species) (Fig. 6). Additionally, the analyses



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suggested that 283 seedlings have unknown parents which were not related to *A. nebrodensis* (i.e. both parents are other *Abies* species) (Fig. 6). In this way, we estimated the presence of up to 17 different unknown genotypes different from those of the 30 adult-trees of *A. nebrodensis*, which suggest that hybridization with alien firs is common in plants from the nursery. Finally, we could not infer the parental origin with an acceptable level of confidence (mean probability of correct assignment < 50%) for 251 of the 1776 seedlings (Table 5). For these seedlings, the paternity analysis frequently assigned at least one of the parents to a different alien fir genotype. Details of results of paternity tests and the probability of correct assignments (considering as such two different thresholds: 100% and higher than 90%) are specified in Table 6.

Table 5. Results of the genetic characterization of the 2064 young individuals of *Abies nebrodensis* sampled in the local nursery Piano Noce.

1. Seedlings genetically characterized:	1776 (86.05% of total seedlings)
a) Seedlings whose parental origin was confidentially inferred:	1525
a.1) Both parents are <i>A. nebrodensis</i> adult-trees:	897
a.2) One of the parentals is <i>A. nebrodensis</i> , but the other one is unknown (i.e. another <i>Abies</i> species):	345
a.3) Both parents are unknown (i.e. another <i>Abies</i> species):	283
b) Seedlings whose parental origin could not be confidentially inferred:	251
2. Seedlings that could not be genetically characterized:	288 (13.95% of total seedlings)

Seedlings whose parental origin was confidentially inferred (n = 1525)

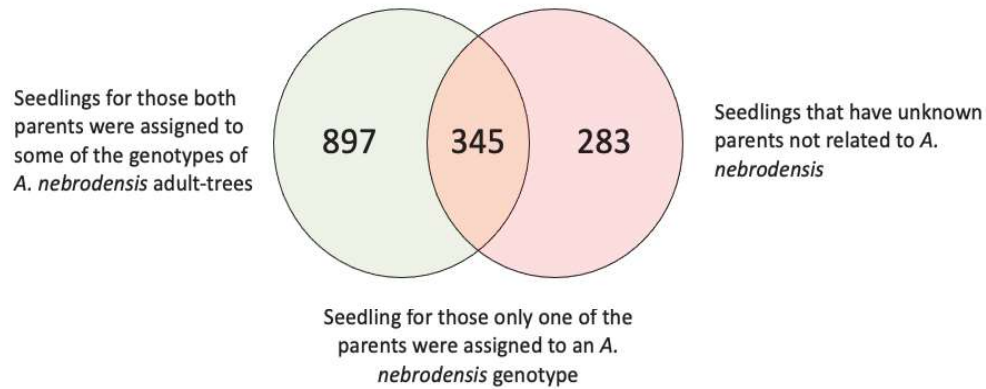


Fig. 6. Venn diagram showing the number of seedlings for those both parents, one or none of them were assigned to some of the genotypes of *A. nebrodensis* adult-trees with 100% of confidentiality.

3.2. Genetic diversity of pure *Abies nebrodensis* Seedlings growing at the nursery

Most of the pure *Abies nebrodensis* seedlings were originated by selfing (Table 7). We assessed the inbreeding level of the analyzed seedlings (n = 1776) by estimating their inbreeding coefficient (F_{is}). As expected, we obtained very similar values to those obtained for the natural population. Thus, $F_{is} = 0.354$ when inbreeding was accounted in the analysis, obtaining a higher value ($F_{is} = 0.523$) when selfing was considered in the analysis; in any case, these F_{is} values point to a remarkable level of inbreeding for *A. nebrodensis* individuals. Moreover, we estimated the effective population size (N_e), which is a key parameter in population genetics that estimate the number of individuals that effectively contributes offspring to the next generation. We found that $N_e = 12$ (6 – 26; Confidence Interval 95%) for the *A. nebrodensis* population, reflecting the strong impact of genetic drift and inbreeding on the evolutionary dynamics of this population.

The genetic origin of each *A. nebrodensis* seedling from the nursery is detailed in Tables 6 and 7.

Table 6. List of the 1776 seedlings of *A. nebrodensis* sampled from the nursely Piano Noce with their inferred progenitors as a result of paternity tests and the probability of correct assignment (considering as such two different thresholds: 100% and higher than 90%). The symbol "#" indicates those cases where the genotypes of the inferred father and/or mother were different from those of *A. nebrodensis* adult-trees. Note that one seedling may appear in two or more rows because of the low probability of correct assignment.

Offspring ID	Inferred Dad	Inferred Mum	Probability (%)	Pure <i>A.nebrodensis</i> (threshold = 100%)	Pure <i>A.nebrodensis</i> (threshold >90%)
08_2013_0001	8M	8M	100	Yes	Yes
08_2013_0002	8M	8M	100	Yes	Yes
08_2013_0003	8M	8M	100	Yes	Yes
08_2013_0004	8M	8M	100	Yes	Yes
08_2013_0005	8M	8M	100	Yes	Yes
08_2013_0006	8M	8M	100	Yes	Yes
08_2013_0007	#	8M	100	Hybrid	Hybrid
08_2013_0008	8M	8M	100	Yes	Yes
08_2013_0009	#	8M	100	Hybrid	Hybrid
08_2013_0010	8M	8M	100	Yes	Yes
08_2013_0011	8M	8M	100	Yes	Yes
08_2013_0012	#	8M	100	Hybrid	Hybrid
08_2013_0013	#	8M	100	Hybrid	Hybrid
08_2013_0014	8M	8M	100	Yes	Yes
08_2013_0015	8M	8M	100	Yes	Yes
08_2013_0016	8M	8M	100	Yes	Yes
08_2013_0017	#	8M	100	Hybrid	Hybrid
08_2013_0018	8M	8M	100	Yes	Yes
08_2013_0019	8M	8M	100	Yes	Yes
08_2013_0020	8M	8M	100	Yes	Yes
08_2013_0021	#	8M	100	Hybrid	Hybrid
08_2013_0022	#	8M	100	Hybrid	Hybrid
08_2013_0023	8M	8M	100	Yes	Yes
08_2013_0024	8M	8M	100	Yes	Yes
08_2013_0025	8M	8M	100	Yes	Yes
08_2013_0026	8M	8M	100	Yes	Yes
08_2013_0027	#	8M	100	Hybrid	Hybrid
08_2013_0028	8M	8M	100	Yes	Yes
08_2013_0029	8M	8M	100	Yes	Yes



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08_2013_0030	8M	8M	100	Yes	Yes
08_2013_0031	8M	8M	100	Yes	Yes
08_2013_0032	8M	8M	100	Yes	Yes
08_2013_0033	8M	8M	100	Yes	Yes
08_2013_0034	#	8M	100	Hybrid	Hybrid
08_2013_0035	27M	27M	100	Yes	Yes
08_2013_0036	8M	8M	100	Yes	Yes
08_2013_0037	8M	8M	100	Yes	Yes
08_2013_0038	8M	8M	100	Yes	Yes
08_2013_0039	8M	8M	100	Yes	Yes
08_2013_0040	8M	8M	100	Yes	Yes
08_2013_0041	#	8M	100	Hybrid	Hybrid
08_2013_0042	8M	8M	100	Yes	Yes
08_2013_0043	8M	8M	100	Yes	Yes
08_2013_0044	8M	8M	100	Yes	Yes
08_2013_0045	#	8M	100	Hybrid	Hybrid
08_2013_0046	8M	8M	100	Yes	Yes
08_2013_0047	#	8M	100	Hybrid	Hybrid
08_2013_0048	8M	8M	100	Yes	Yes
08_2013_0049	8M	8M	100	Yes	Yes
08_2013_0050	8M	8M	100	Yes	Yes
08_2013_0051	#	8M	100	Hybrid	Hybrid
08_2013_0052	#	8M	100	Hybrid	Hybrid
08_2013_0053	8M	8M	100	Yes	Yes
08_2013_0054	8M	8M	100	Yes	Yes
08_2013_0055	8M	8M	100	Yes	Yes
08_2013_0056	8M	8M	100	Yes	Yes
08_2013_0057	#	8M	100	Hybrid	Hybrid
08_2013_0058	8M	8M	100	Yes	Yes
08_2013_0059	8M	8M	100	Yes	Yes
08_2013_0060	8M	8M	100	Yes	Yes
08_2013_0061	8M	8M	100	Yes	Yes
08_2013_0062	8M	8M	100	Yes	Yes
08_2013_0063	8M	8M	100	Yes	Yes
08_2013_0064	8M	8M	100	Yes	Yes
08_2013_0065	8M	8M	100	Yes	Yes
08_2013_0066	8M	8M	100	Yes	Yes
08_2013_0067	8M	8M	100	Yes	Yes



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08_2013_0068	8M	8M	100	Yes	Yes
08_2013_0069	8M	8M	100	Yes	Yes
08_2013_0070	8M	8M	100	Yes	Yes
08_2013_0071	8M	8M	100	Yes	Yes
08_2013_0072	8M	8M	100	Yes	Yes
08_2013_0073	8M	8M	100	Yes	Yes
08_2013_0074	8M	8M	100	Yes	Yes
08_2013_0075	8M	8M	100	Yes	Yes
08_2013_0076	8M	8M	100	Yes	Yes
08_2013_0077	8M	8M	100	Yes	Yes
08_2013_0078	8M	8M	100	Yes	Yes
08_2013_0079	8M	8M	100	Yes	Yes
08_2013_0080	8M	8M	100	Yes	Yes
08_2013_0081	8M	8M	100	Yes	Yes
08_2013_0082	8M	8M	100	Yes	Yes
08_2013_0083	8M	8M	100	Yes	Yes
08_2013_0084	8M	8M	100	Yes	Yes
08_2013_0085	8M	8M	100	Yes	Yes
08_2013_0086	8M	8M	100	Yes	Yes
08_2013_0087	8M	8M	100	Yes	Yes
08_2013_0088	8M	8M	100	Yes	Yes
08_2013_0089	8M	8M	100	Yes	Yes
08_2013_0090	8M	8M	100	Yes	Yes
08_2013_0091	#	8M	100	Hybrid	Hybrid
08_2013_0092	8M	8M	100	Yes	Yes
08_2013_0093	8M	8M	100	Yes	Yes
08_2013_0094	8M	8M	100	Yes	Yes
08_2013_0095	8M	8M	100	Yes	Yes
08_2013_0096	8M	8M	100	Yes	Yes
08_2013_0097	8M	8M	100	Yes	Yes
08_2013_0098	#	8M	100	Hybrid	Hybrid
08_2013_0099	#	8M	100	Hybrid	Hybrid
08_2013_0100	#	8M	100	Hybrid	Hybrid
10_2009_0101	10M	10M	100	Yes	Yes
10_2009_0102	10M	10M	100	Yes	Yes
10_2009_0103	#	10M	100	Hybrid	Hybrid
10_2009_0104	10M	10M	100	Yes	Yes
10_2009_0105	10M	10M	100	Yes	Yes



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10_2009_0106	10M	10M	100	Yes	Yes
10_2009_0107	10M	10M	100	Yes	Yes
10_2009_0108	10M	10M	100	Yes	Yes
10_2009_0109	10M	10M	100	Yes	Yes
10_2009_0110	10M	10M	100	Yes	Yes
10_2009_0111	10M	10M	100	Yes	Yes
10_2009_0112	10M	10M	100	Yes	Yes
10_2009_0113	#	10M	100	Hybrid	Hybrid
10_2009_0114	10M	10M	100	Yes	Yes
10_2009_0115	10M	10M	100	Yes	Yes
10_2009_0116	10M	10M	100	Yes	Yes
10_2009_0117	10M	10M	100	Yes	Yes
10_2009_0118	10M	10M	100	Yes	Yes
10_2009_0119	10M	10M	100	Yes	Yes
10_2009_0120	10M	10M	100	Yes	Yes
10_2009_0121	10M	10M	100	Yes	Yes
10_2009_0122	10M	10M	100	Yes	Yes
10_2009_0123	10M	10M	100	Yes	Yes
10_2009_0124	10M	10M	100	Yes	Yes
10_2009_0125	10M	10M	100	Yes	Yes
10_2009_0126	10M	10M	100	Yes	Yes
10_2009_0127	10M	10M	100	Yes	Yes
10_2009_0128	10M	10M	100	Yes	Yes
10_2009_0129	10M	10M	100	Yes	Yes
10_2009_0130	12M	12M	99.97	Yes	Yes
10_2009_0131	10M	10M	100	Yes	Yes
10_2009_0132	10M	10M	100	Yes	Yes
10_2009_0133	10M	10M	100	Yes	Yes
10_2009_0134	10M	10M	100	Yes	Yes
10_2009_0135	10M	10M	100	Yes	Yes
10_2009_0136	10M	10M	100	Yes	Yes
10_2009_0137	10M	10M	100	Yes	Yes
10_2009_0138	10M	10M	100	Yes	Yes
10_2009_0139	10M	10M	100	Yes	Yes
10_2009_0140	10M	10M	100	Yes	Yes
10_2009_0141	10M	10M	100	Yes	Yes
10_2009_0142	10M	10M	100	Yes	Yes
10_2009_0143	10M	10M	100	Yes	Yes



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10_2009_0144	10M	10M	100	Yes	Yes
10_2009_0145	10M	10M	100	Yes	Yes
10_2009_0146	10M	10M	100	Yes	Yes
10_2009_0147	10M	10M	100	Yes	Yes
10_2009_0148	10M	10M	100	Yes	Yes
10_2009_0149	10M	10M	100	Yes	Yes
10_2009_0150	10M	10M	100	Yes	Yes
10_2009_0151	10M	10M	100	Yes	Yes
10_2009_0152	10M	10M	100	Yes	Yes
10_2009_0153	10M	10M	100	Yes	Yes
10_2009_0154	10M	10M	100	Yes	Yes
10_2009_0155	10M	10M	100	Yes	Yes
10_2009_0156	10M	10M	100	Yes	Yes
10_2009_0157	10M	10M	100	Yes	Yes
10_2009_0158	10M	10M	100	Yes	Yes
10_2009_0159	10M	10M	100	Yes	Yes
10_2009_0160	10M	10M	100	Yes	Yes
10_2009_0161	10M	10M	100	Yes	Yes
10_2009_0162	10M	10M	100	Yes	Yes
10_2009_0163	10M	10M	100	Yes	Yes
10_2009_0164	10M	10M	100	Yes	Yes
10_2009_0165	10M	10M	100	Yes	Yes
10_2009_0166	10M	10M	100	Yes	Yes
10_2009_0167	10M	10M	100	Yes	Yes
10_2009_0168	10M	10M	100	Yes	Yes
10_2009_0169	10M	10M	100	Yes	Yes
10_2009_0170	10M	10M	100	Yes	Yes
10_2009_0171	10M	10M	100	Yes	Yes
10_2009_0172	10M	10M	100	Yes	Yes
10_2009_0173	10M	10M	100	Yes	Yes
10_2009_0174	10M	10M	100	Yes	Yes
10_2009_0175	10M	10M	100	Yes	Yes
10_2009_0176	10M	10M	100	Yes	Yes
10_2009_0177	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0177	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0178	29M	10M	100	Yes	Yes
10_2009_0179	10M	10M	100	Yes	Yes
10_2009_0180	10M	10M	100	Yes	Yes



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10_2009_0181	29M	10M	100	Yes	Yes
10_2009_0182	10M	10M	100	Yes	Yes
10_2009_0183	10M	10M	100	Yes	Yes
10_2009_0184	10M	10M	100	Yes	Yes
10_2009_0185	10M	10M	100	Yes	Yes
10_2009_0186	10M	10M	100	Yes	Yes
10_2009_0187	10M	10M	100	Yes	Yes
10_2009_0188	10M	10M	100	Yes	Yes
10_2009_0189	10M	10M	100	Yes	Yes
10_2009_0190	10M	10M	100	Yes	Yes
10_2009_0191	10M	10M	100	Yes	Yes
10_2009_0192	10M	10M	100	Yes	Yes
10_2009_0193	10M	10M	100	Yes	Yes
10_2009_0194	10M	10M	100	Yes	Yes
10_2009_0195	10M	10M	100	Yes	Yes
10_2009_0196	10M	10M	100	Yes	Yes
10_2009_0197	10M	10M	100	Yes	Yes
10_2009_0198	10M	10M	100	Yes	Yes
10_2009_0199	10M	10M	100	Yes	Yes
10_2009_0201	10M	10M	100	Yes	Yes
10_2009_0202	12M	#	28.69	Uncertain origin	Uncertain origin
10_2009_0202	#	12M	28.61	Uncertain origin	Uncertain origin
10_2009_0202	30M	12M	23.25	Uncertain origin	Uncertain origin
10_2009_0202	12M	30M	19.44	Uncertain origin	Uncertain origin
10_2009_0203	10M	10M	100	Yes	Yes
10_2009_0204	10M	10M	100	Yes	Yes
10_2009_0205	#	#	100	Unknown parents	Unknown parents
10_2009_0206	10M	10M	100	Yes	Yes
10_2009_0207	10M	10M	100	Yes	Yes
10_2009_0208	10M	10M	100	Yes	Yes
10_2009_0209	10M	10M	100	Yes	Yes
10_2009_0210	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0210	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0211	#	10M	100	Hybrid	Hybrid
10_2009_0212	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0212	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0213	10M	10M	100	Yes	Yes
10_2009_0214	10M	10M	100	Yes	Yes



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10_2009_0215	#	10M	100	Hybrid	Hybrid
10_2009_0216	10M	10M	100	Yes	Yes
10_2009_0217	10M	10M	100	Yes	Yes
10_2009_0218	10M	10M	100	Yes	Yes
10_2009_0219	10M	10M	100	Yes	Yes
10_2009_0220	#	10M	100	Hybrid	Hybrid
10_2009_0221	#	10M	100	Hybrid	Hybrid
10_2009_0222	10M	10M	100	Yes	Yes
10_2009_0223	10M	10M	100	Yes	Yes
10_2009_0224	10M	10M	100	Yes	Yes
10_2009_0225	10M	10M	100	Yes	Yes
10_2009_0226	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0226	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0227	10M	10M	100	Yes	Yes
10_2009_0228	10M	10M	100	Yes	Yes
10_2009_0229	10M	10M	100	Yes	Yes
10_2009_0230	10M	10M	100	Yes	Yes
10_2009_0231	10M	10M	100	Yes	Yes
10_2009_0232	10M	10M	100	Yes	Yes
10_2009_0233	10M	10M	100	Yes	Yes
10_2009_0234	10M	10M	100	Yes	Yes
10_2009_0235	10M	10M	100	Yes	Yes
10_2009_0236	10M	10M	100	Yes	Yes
10_2009_0237	10M	10M	100	Yes	Yes
10_2009_0238	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0238	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0239	10M	10M	100	Yes	Yes
10_2009_0240	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0240	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0241	10M	10M	100	Yes	Yes
10_2009_0242	10M	10M	100	Yes	Yes
10_2009_0243	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0243	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0244	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0244	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0245	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0245	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0246	12M	32M	50.4	Uncertain origin	Uncertain origin



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10_2009_0246	32M	12M	49.6	Uncertain origin	Uncertain origin
10_2009_0247	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0247	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0248	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0248	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0249	#	#	57.31	Uncertain origin	Uncertain origin
10_2009_0249	30M	30M	42.69	Uncertain origin	Uncertain origin
10_2009_0250	12M	12M	94.56	Uncertain origin	Yes
10_2009_0250	22M	22M	5.44	Uncertain origin	-
11_2008_0251	#	#	100	Unknown parents	Unknown parents
11_2008_0252	#	#	100	Unknown parents	Unknown parents
11_2008_0253	17M	17M	100	Yes	Yes
11_2008_0254	13M	13M	100	Yes	Yes
11_2008_0255	17M	17M	100	Yes	Yes
11_2008_0256	17M	17M	100	Yes	Yes
11_2008_0257	17M	17M	100	Yes	Yes
11_2008_0258	#	#	100	Unknown parents	Unknown parents
11_2008_0259	#	#	100	Unknown parents	Unknown parents
11_2008_0260	#	#	100	Unknown parents	Unknown parents
11_2008_0261	#	#	100	Unknown parents	Unknown parents
11_2008_0262	#	11M	100	Hybrid	Hybrid
11_2008_0263	#	11M	100	Hybrid	Hybrid
11_2008_0264	#	#	100	Unknown parents	Unknown parents
11_2008_0265	#	11M	100	Hybrid	Hybrid
11_2008_0266	#	#	100	Unknown parents	Unknown parents
11_2008_0267	#	#	100	Unknown parents	Unknown parents
11_2008_0268	6M	6M	100	Yes	Yes
11_2008_0269	#	#	100	Unknown parents	Unknown parents
11_2008_0270	#	#	100	Unknown parents	Unknown parents
11_2008_0271	#	#	100	Unknown parents	Unknown parents
11_2008_0272	#	11M	100	Hybrid	Hybrid
11_2008_0273	#	#	100	Unknown parents	Unknown parents
11_2008_0274	17M	17M	100	Yes	Yes
11_2008_0275	#	11M	100	Hybrid	Hybrid
11_2008_0276	2M	11M	100	Yes	Yes
11_2008_0277	#	#	100	Unknown parents	Unknown parents
11_2008_0278	#	#	100	Unknown parents	Unknown parents
11_2008_0279	#	#	100	Unknown parents	Unknown parents



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11_2008_0280	#	#	100	Unknown parents	Unknown parents
11_2008_0281	#	#	100	Unknown parents	Unknown parents
11_2008_0282	17M	17M	100	Yes	Yes
11_2008_0283	#	#	100	Unknown parents	Unknown parents
11_2008_0284	#	#	100	Unknown parents	Unknown parents
11_2008_0285	#	11M	100	Hybrid	Hybrid
11_2008_0286	12M	12M	97.41	Uncertain origin	Yes
11_2008_0286	22M	22M	2.59	Uncertain origin	-
11_2008_0287	#	11M	100	Hybrid	Hybrid
11_2008_0288	#	#	100	Unknown parents	Unknown parents
11_2008_0289	17M	17M	99.97	Yes	Yes
11_2008_0290	#	#	100	Unknown parents	Unknown parents
11_2008_0291	#	11M	100	Hybrid	Hybrid
11_2008_0292	17M	17M	93.71	Uncertain origin	Yes
11_2008_0292	#	#	6.29	Uncertain origin	-
11_2008_0293	#	11M	100	Hybrid	Hybrid
11_2008_0294	#	#	100	Unknown parents	Unknown parents
11_2008_0295	#	#	100	Unknown parents	Unknown parents
11_2008_0296	#	#	100	Unknown parents	Unknown parents
11_2008_0297	17M	17M	99.95	Yes	Yes
11_2008_0298	17M	17M	100	Yes	Yes
11_2008_0299	#	#	100	Unknown parents	Unknown parents
11_2008_0300	#	#	100	Unknown parents	Unknown parents
11_2008_0301	17M	17M	100	Yes	Yes
11_2008_0302	#	#	100	Unknown parents	Unknown parents
11_2008_0303	#	#	100	Unknown parents	Unknown parents
11_2008_0304	#	#	100	Unknown parents	Unknown parents
11_2008_0305	#	#	100	Unknown parents	Unknown parents
11_2008_0306	17M	17M	100	Yes	Yes
11_2008_0307	17M	17M	100	Yes	Yes
11_2008_0308	17M	17M	100	Yes	Yes
11_2008_0309	#	11M	100	Hybrid	Hybrid
11_2008_0310	12M	12M	100	Yes	Yes
11_2008_0311	17M	17M	100	Yes	Yes
11_2008_0312	17M	17M	100	Yes	Yes
11_2008_0313	#	#	100	Unknown parents	Unknown parents
11_2008_0314	#	11M	100	Hybrid	Hybrid
11_2008_0315	#	#	100	Unknown parents	Unknown parents



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11_2008_0316	#	#	100	Unknown parents	Unknown parents
11_2008_0317	17M	17M	100	Yes	Yes
11_2008_0318	#	#	100	Unknown parents	Unknown parents
11_2008_0319	#	11M	100	Hybrid	Hybrid
11_2008_0320	#	#	100	Unknown parents	Unknown parents
11_2008_0321	17M	17M	100	Yes	Yes
11_2008_0322	#	#	100	Unknown parents	Unknown parents
11_2008_0323	#	#	100	Unknown parents	Unknown parents
11_2008_0324	#	#	100	Unknown parents	Unknown parents
11_2008_0325	17M	17M	100	Yes	Yes
11_2008_0326	#	#	100	Unknown parents	Unknown parents
11_2008_0327	#	11M	100	Hybrid	Hybrid
11_2008_0328	2M	#	53.32	Uncertain origin	Uncertain origin
11_2008_0328	#	2M	46.68	Uncertain origin	Uncertain origin
11_2008_0329	#	#	100	Unknown parents	Unknown parents
11_2008_0330	#	#	100	Unknown parents	Unknown parents
11_2008_0331	#	#	100	Unknown parents	Unknown parents
11_2008_0332	17M	17M	100	Yes	Yes
11_2008_0333	#	11M	100	Hybrid	Hybrid
11_2008_0334	17M	17M	100	Yes	Yes
11_2008_0335	#	11M	100	Hybrid	Hybrid
11_2008_0336	#	#	100	Unknown parents	Unknown parents
11_2008_0337	17M	17M	100	Yes	Yes
11_2008_0338	#	11M	100	Hybrid	Hybrid
11_2008_0339	#	#	100	Unknown parents	Unknown parents
11_2008_0340	#	#	100	Unknown parents	Unknown parents
11_2008_0341	#	11M	100	Hybrid	Hybrid
11_2008_0342	#	#	100	Unknown parents	Unknown parents
11_2008_0343	#	#	100	Unknown parents	Unknown parents
11_2008_0344	#	#	100	Unknown parents	Unknown parents
11_2008_0345	#	11M	100	Hybrid	Hybrid
11_2008_0346	#	#	100	Unknown parents	Unknown parents
11_2008_0347	#	#	100	Unknown parents	Unknown parents
11_2008_0348	17M	17M	100	Yes	Yes
11_2008_0349	17M	17M	100	Yes	Yes
11_2008_0350	#	#	100	Unknown parents	Unknown parents
11_2008_0351	#	#	100	Unknown parents	Unknown parents
11_2008_0352	#	11M	100	Hybrid	Hybrid



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11_2008_0353	#	#	100	Unknown parents	Unknown parents
11_2008_0354	#	#	100	Unknown parents	Unknown parents
11_2008_0355	#	#	100	Unknown parents	Unknown parents
11_2008_0356	#	#	100	Unknown parents	Unknown parents
11_2008_0357	#	#	100	Unknown parents	Unknown parents
11_2008_0358	#	#	100	Unknown parents	Unknown parents
11_2008_0359	#	11M	100	Hybrid	Hybrid
11_2008_0360	#	#	100	Unknown parents	Unknown parents
11_2008_0361	#	11M	100	Hybrid	Hybrid
11_2008_0362	#	#	100	Unknown parents	Unknown parents
11_2008_0363	#	#	100	Unknown parents	Unknown parents
11_2008_0364	#	#	100	Unknown parents	Unknown parents
11_2008_0365	#	#	100	Unknown parents	Unknown parents
11_2008_0366	#	#	100	Unknown parents	Unknown parents
11_2008_0367	17M	17M	100	Yes	Yes
11_2008_0368	#	#	100	Unknown parents	Unknown parents
11_2008_0369	#	#	100	Unknown parents	Unknown parents
11_2008_0370	#	#	100	Unknown parents	Unknown parents
11_2008_0371	#	#	100	Unknown parents	Unknown parents
11_2008_0372	#	#	100	Unknown parents	Unknown parents
11_2008_0373	#	#	100	Unknown parents	Unknown parents
11_2008_0374	#	#	100	Unknown parents	Unknown parents
11_2008_0375	17M	17M	100	Yes	Yes
11_2008_0376	#	11M	100	Hybrid	Hybrid
11_2008_0377	#	#	100	Unknown parents	Unknown parents
11_2008_0378	#	#	100	Unknown parents	Unknown parents
11_2008_0379	17M	17M	100	Yes	Yes
11_2008_0380	#	#	100	Unknown parents	Unknown parents
11_2008_0381	#	#	100	Unknown parents	Unknown parents
11_2008_0382	#	#	100	Unknown parents	Unknown parents
11_2008_0383	#	#	100	Unknown parents	Unknown parents
11_2008_0384	#	#	100	Unknown parents	Unknown parents
11_2008_0385	#	#	100	Unknown parents	Unknown parents
11_2008_0387	#	11M	100	Hybrid	Hybrid
11_2008_0388	#	#	100	Unknown parents	Unknown parents
11_2008_0389	#	#	100	Unknown parents	Unknown parents
11_2008_0390	#	#	100	Unknown parents	Unknown parents
11_2008_0392	#	11M	100	Hybrid	Hybrid



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11_2008_0393	17M	17M	100	Yes	Yes
11_2008_0394	#	#	100	Unknown parents	Unknown parents
11_2008_0395	17M	17M	100	Yes	Yes
11_2008_0396	#	#	100	Unknown parents	Unknown parents
11_2008_0397	#	#	100	Unknown parents	Unknown parents
11_2008_0398	#	11M	100	Hybrid	Hybrid
11_2008_0399	#	#	100	Unknown parents	Unknown parents
11_2008_0400	#	#	100	Unknown parents	Unknown parents
11_2008_0401	#	#	100	Unknown parents	Unknown parents
11_2008_0402	17M	17M	100	Yes	Yes
11_2008_0403	#	#	100	Unknown parents	Unknown parents
11_2008_0404	#	11M	100	Hybrid	Hybrid
11_2008_0405	#	#	100	Unknown parents	Unknown parents
11_2008_0406	17M	17M	100	Yes	Yes
11_2008_0407	#	#	100	Unknown parents	Unknown parents
11_2008_0408	17M	17M	100	Yes	Yes
11_2008_0409	17M	17M	100	Yes	Yes
11_2008_0410	#	11M	100	Hybrid	Hybrid
11_2008_0411	#	#	100	Unknown parents	Unknown parents
11_2008_0412	#	11M	100	Hybrid	Hybrid
11_2008_0413	#	#	100	Unknown parents	Unknown parents
11_2008_0414	17M	17M	100	Yes	Yes
11_2008_0415	#	#	100	Unknown parents	Unknown parents
11_2008_0416	17M	17M	100	Yes	Yes
11_2008_0417	#	11M	100	Hybrid	Hybrid
11_2008_0418	#	#	100	Unknown parents	Unknown parents
11_2008_0419	#	11M	100	Hybrid	Hybrid
11_2008_0420	#	#	100	Unknown parents	Unknown parents
11_2008_0421	#	#	100	Unknown parents	Unknown parents
11_2008_0422	#	#	100	Unknown parents	Unknown parents
11_2008_0423	#	#	100	Unknown parents	Unknown parents
11_2008_0424	#	11M	100	Hybrid	Hybrid
11_2008_0425	#	#	100	Unknown parents	Unknown parents
11_2008_0426	#	11M	100	Hybrid	Hybrid
11_2008_0427	#	#	100	Unknown parents	Unknown parents
11_2008_0428	#	#	100	Unknown parents	Unknown parents
11_2008_0429	17M	17M	100	Yes	Yes
11_2008_0430	17M	17M	100	Yes	Yes



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11_2009_0431	#	#	100	Unknown parents	Unknown parents
11_2009_0432	#	#	100	Unknown parents	Unknown parents
11_2009_0434	#	#	100	Unknown parents	Unknown parents
11_2009_0435	#	#	100	Unknown parents	Unknown parents
11_2009_0437	2M	11M	100	Yes	Yes
11_2009_0439	#	#	100	Unknown parents	Unknown parents
11_2009_0441	#	11M	100	Hybrid	Hybrid
11_2009_0442	#	#	100	Unknown parents	Unknown parents
11_2009_0443	#	11M	100	Hybrid	Hybrid
11_2009_0444	#	#	100	Unknown parents	Unknown parents
11_2009_0445	17M	17M	100	Yes	Yes
11_2009_0446	#	#	100	Unknown parents	Unknown parents
11_2009_0447	#	#	100	Unknown parents	Unknown parents
11_2009_0448	#	#	100	Unknown parents	Unknown parents
11_2009_0449	#	11M	100	Hybrid	Hybrid
11_2009_0450	#	#	100	Unknown parents	Unknown parents
11_2009_0451	#	#	100	Unknown parents	Unknown parents
11_2009_0453	8M	8M	100	Yes	Yes
11_2009_0454	#	#	100	Unknown parents	Unknown parents
11_2009_0455	#	#	100	Unknown parents	Unknown parents
11_2009_0456	17M	17M	100	Yes	Yes
11_2009_0457	17M	17M	100	Yes	Yes
11_2009_0458	#	#	100	Unknown parents	Unknown parents
11_2009_0460	#	#	100	Unknown parents	Unknown parents
11_2009_0462	#	#	100	Unknown parents	Unknown parents
11_2009_0463	#	11M	100	Hybrid	Hybrid
11_2009_0465	17M	17M	100	Yes	Yes
11_2009_0467	17M	17M	100	Yes	Yes
11_2009_0468	#	#	100	Unknown parents	Unknown parents
11_2009_0471	#	11M	100	Hybrid	Hybrid
11_2009_0473	#	#	100	Unknown parents	Unknown parents
11_2009_0474	17M	17M	100	Yes	Yes
11_2009_0475	#	11M	100	Hybrid	Hybrid
11_2009_0476	#	11M	100	Hybrid	Hybrid
11_2009_0477	17M	17M	100	Yes	Yes
11_2009_0479	#	11M	100	Hybrid	Hybrid
11_2009_0482	#	#	100	Unknown parents	Unknown parents
11_2009_0483	#	#	100	Unknown parents	Unknown parents



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11_2009_0484	#	#	100	Unknown parents	Unknown parents
11_2009_0485	#	#	57.31	Uncertain origin	Uncertain origin
11_2009_0485	30M	30M	42.69	Uncertain origin	Uncertain origin
11_2009_0486	#	#	100	Unknown parents	Unknown parents
11_2009_0487	#	#	100	Unknown parents	Unknown parents
11_2009_0488	#	#	100	Unknown parents	Unknown parents
11_2009_0489	#	#	100	Unknown parents	Unknown parents
11_2009_0491	#	#	100	Unknown parents	Unknown parents
11_2009_0492	17M	17M	100	Yes	Yes
11_2009_0493	#	#	57.78	Uncertain origin	Uncertain origin
11_2009_0493	#	30M	24.33	Uncertain origin	Uncertain origin
11_2009_0493	30M	#	17.89	Uncertain origin	Uncertain origin
11_2009_0494	#	11M	100	Hybrid	Hybrid
11_2009_0495	#	11M	100	Hybrid	Hybrid
11_2009_0496	#	#	100	Unknown parents	Unknown parents
11_2009_0497	#	#	100	Unknown parents	Unknown parents
11_2009_0498	#	#	100	Unknown parents	Unknown parents
11_2009_0499	17M	17M	100	Yes	Yes
11_2009_0500	#	#	100	Unknown parents	Unknown parents
11_2009_0501	#	11M	100	Hybrid	Hybrid
11_2009_0502	#	11M	40.31	Uncertain origin	Uncertain origin
11_2009_0502	11M	#	31.44	Uncertain origin	Uncertain origin
11_2009_0502	#	#	28.26	Uncertain origin	Uncertain origin
11_2009_0503	#	#	100	Unknown parents	Unknown parents
11_2009_0504	2M	11M	100	Yes	Yes
11_2009_0505	#	#	100	Unknown parents	Unknown parents
11_2009_0506	#	#	100	Unknown parents	Unknown parents
11_2009_0507	#	#	100	Unknown parents	Unknown parents
11_2009_0508	#	#	100	Unknown parents	Unknown parents
11_2009_0509	17M	17M	100	Yes	Yes
11_2009_0510	#	11M	100	Hybrid	Hybrid
11_2009_0511	#	#	100	Unknown parents	Unknown parents
11_2009_0512	#	#	100	Unknown parents	Unknown parents
11_2009_0513	#	#	100	Unknown parents	Unknown parents
11_2009_0514	#	#	100	Unknown parents	Unknown parents
11_2009_0515	#	8M	50.32	Uncertain origin	Uncertain origin
11_2009_0515	8M	#	49.68	Uncertain origin	Uncertain origin
11_2009_0516	#	#	100	Unknown parents	Unknown parents



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11_2009_0517	#	8M	50.32	Uncertain origin	Uncertain origin
11_2009_0517	8M	#	49.68	Uncertain origin	Uncertain origin
11_2009_0518	17M	17M	100	Yes	Yes
11_2009_0519	#	#	100	Unknown parents	Unknown parents
11_2009_0520	#	11M	100	Hybrid	Hybrid
11_2009_0521	#	#	100	Unknown parents	Unknown parents
11_2009_0522	#	#	100	Unknown parents	Unknown parents
11_2009_0523	#	#	100	Unknown parents	Unknown parents
11_2009_0524	#	#	100	Unknown parents	Unknown parents
11_2009_0525	#	#	100	Unknown parents	Unknown parents
11_2009_0526	#	11M	100	Hybrid	Hybrid
11_2009_0527	#	11M	100	Hybrid	Hybrid
11_2009_0528	#	#	100	Unknown parents	Unknown parents
11_2009_0530	#	#	100	Unknown parents	Unknown parents
11_2009_0531	#	#	100	Unknown parents	Unknown parents
11_2009_0532	17M	17M	100	Yes	Yes
11_2009_0533	#	11M	100	Hybrid	Hybrid
11_2009_0534	17M	17M	100	Yes	Yes
11_2009_0535	9M	9M	100	Yes	Yes
11_2009_0536	#	#	100	Unknown parents	Unknown parents
11_2009_0537	#	11M	100	Hybrid	Hybrid
11_2009_0538	#	#	100	Unknown parents	Unknown parents
11_2009_0539	9M	9M	100	Yes	Yes
11_2009_0540	#	#	100	Unknown parents	Unknown parents
11_2009_0541	14M	14M	100	Yes	Yes
11_2009_0542	#	#	100	Unknown parents	Unknown parents
11_2009_0543	#	11M	100	Hybrid	Hybrid
11_2009_0544	#	#	100	Unknown parents	Unknown parents
11_2009_0545	27M	#	54.13	Uncertain origin	Uncertain origin
11_2009_0545	#	27M	45.87	Uncertain origin	Uncertain origin
11_2009_0546	#	11M	100	Hybrid	Hybrid
11_2009_0547	18M	18M	100	Yes	Yes
11_2009_0548	6M	11M	100	Yes	Yes
11_2009_0549	#	#	100	Unknown parents	Unknown parents
11_2009_0550	#	11M	100	Hybrid	Hybrid
11_2009_0551	#	11M	100	Hybrid	Hybrid
11_2009_0552	#	#	100	Unknown parents	Unknown parents
11_2009_0553	#	11M	100	Hybrid	Hybrid



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11_2009_0554	#	11M	100	Hybrid	Hybrid
11_2009_0555	#	11M	100	Hybrid	Hybrid
11_2009_0556	#	#	100	Unknown parents	Unknown parents
11_2009_0557	#	11M	100	Hybrid	Hybrid
11_2009_0558	17M	17M	100	Yes	Yes
11_2009_0559	#	11M	100	Hybrid	Hybrid
11_2009_0560	#	11M	100	Hybrid	Hybrid
11_2009_0561	#	11M	100	Hybrid	Hybrid
11_2009_0562	#	#	100	Unknown parents	Unknown parents
11_2009_0563	#	11M	100	Hybrid	Hybrid
11_2009_0564	#	11M	100	Hybrid	Hybrid
11_2009_0565	#	11M	100	Hybrid	Hybrid
11_2009_0566	#	11M	100	Hybrid	Hybrid
11_2009_0567	#	11M	100	Hybrid	Hybrid
11_2009_0568	#	11M	100	Hybrid	Hybrid
11_2009_0569	#	11M	100	Hybrid	Hybrid
11_2009_0570	#	11M	100	Hybrid	Hybrid
11_2009_0571	#	11M	100	Hybrid	Hybrid
11_2009_0572	#	11M	100	Hybrid	Hybrid
11_2009_0573	#	11M	100	Hybrid	Hybrid
11_2009_0574	#	11M	100	Hybrid	Hybrid
11_2009_0575	#	11M	100	Hybrid	Hybrid
11_2009_0576	#	11M	100	Hybrid	Hybrid
11_2009_0577	#	11M	100	Hybrid	Hybrid
11_2009_0578	#	#	100	Unknown parents	Unknown parents
11_2009_0579	18M	18M	100	Yes	Yes
11_2009_0580	#	11M	100	Hybrid	Hybrid
11_2009_0581	17M	17M	100	Yes	Yes
11_2009_0582	#	11M	100	Hybrid	Hybrid
11_2009_0583	#	11M	100	Hybrid	Hybrid
11_2009_0584	#	11M	100	Hybrid	Hybrid
11_2009_0585	18M	18M	100	Yes	Yes
11_2009_0586	#	11M	100	Hybrid	Hybrid
11_2009_0588	#	11M	100	Hybrid	Hybrid
11_2009_0589	#	11M	100	Hybrid	Hybrid
11_2009_0591	#	11M	100	Hybrid	Hybrid
11_2009_0592	#	11M	100	Hybrid	Hybrid
11_2009_0593	18M	18M	100	Yes	Yes



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11_2009_0594	#	#	100	Unknown parents	Unknown parents
11_2009_0595	18M	18M	100	Yes	Yes
11_2009_0596	#	#	57.31	Uncertain origin	Uncertain origin
11_2009_0596	#	30M	24.56	Uncertain origin	Uncertain origin
11_2009_0596	30M	#	18.13	Uncertain origin	Uncertain origin
11_2009_0597	#	#	100	Unknown parents	Unknown parents
11_2009_0598	#	11M	100	Hybrid	Hybrid
11_2009_0599	#	#	100	Unknown parents	Unknown parents
11_2009_0600	18M	18M	100	Yes	Yes
11_2009_0601	#	#	100	Unknown parents	Unknown parents
11_2009_0602	#	#	100	Unknown parents	Unknown parents
11_2009_0603	#	#	100	Unknown parents	Unknown parents
11_2009_0604	#	#	100	Unknown parents	Unknown parents
11_2009_0605	#	#	100	Unknown parents	Unknown parents
11_2009_0606	#	11M	100	Hybrid	Hybrid
11_2009_0607	#	#	100	Unknown parents	Unknown parents
11_2009_0608	10M	10M	100	Yes	Yes
11_2009_0609	12M	12M	99.97	Yes	Yes
11_2009_0610	#	#	100	Unknown parents	Unknown parents
11_2010_0611	#	#	100	Unknown parents	Unknown parents
11_2010_0612	#	#	100	Unknown parents	Unknown parents
11_2010_0613	#	#	100	Unknown parents	Unknown parents
11_2010_0614	17M	17M	100	Yes	Yes
11_2010_0615	#	#	100	Unknown parents	Unknown parents
11_2010_0616	#	#	100	Unknown parents	Unknown parents
11_2010_0617	#	#	100	Unknown parents	Unknown parents
11_2010_0618	17M	17M	100	Yes	Yes
11_2010_0619	15M	15M	100	Yes	Yes
11_2010_0620	#	11M	100	Hybrid	Hybrid
11_2010_0621	#	11M	100	Hybrid	Hybrid
11_2010_0622	#	11M	100	Hybrid	Hybrid
11_2010_0623	#	11M	100	Hybrid	Hybrid
11_2010_0624	9M	9M	100	Yes	Yes
11_2010_0625	10M	10M	100	Yes	Yes
11_2010_0626	10M	10M	100	Yes	Yes
11_2010_0627	#	11M	100	Hybrid	Hybrid
11_2010_0628	#	11M	100	Hybrid	Hybrid
11_2010_0629	#	#	100	Unknown parents	Unknown parents



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11_2010_0630	#	#	100	Unknown parents	Unknown parents
11_2010_0631	#	#	100	Unknown parents	Unknown parents
11_2010_0632	17M	17M	99.68	Yes	Yes
11_2010_0634	17M	17M	100	Yes	Yes
11_2010_0635	#	#	100	Unknown parents	Unknown parents
11_2010_0636	#	#	100	Unknown parents	Unknown parents
11_2010_0637	#	#	100	Unknown parents	Unknown parents
11_2010_0638	17M	17M	100	Yes	Yes
11_2010_0639	#	11M	100	Hybrid	Hybrid
11_2010_0640	#	#	100	Unknown parents	Unknown parents
11_2010_0641	#	11M	100	Hybrid	Hybrid
11_2010_0642	#	#	100	Unknown parents	Unknown parents
11_2010_0643	17M	17M	100	Yes	Yes
11_2010_0644	#	#	100	Unknown parents	Unknown parents
11_2010_0645	17M	17M	100	Yes	Yes
11_2010_0646	17M	17M	100	Yes	Yes
11_2010_0647	#	#	100	Unknown parents	Unknown parents
11_2010_0648	#	#	100	Unknown parents	Unknown parents
11_2010_0650	17M	17M	100	Yes	Yes
11_2010_0651	17M	17M	100	Yes	Yes
11_2010_0652	#	#	100	Unknown parents	Unknown parents
11_2010_0653	#	11M	100	Hybrid	Hybrid
11_2010_0654	#	#	100	Unknown parents	Unknown parents
11_2010_0655	17M	17M	100	Yes	Yes
11_2010_0656	17M	17M	100	Yes	Yes
11_2010_0657	17M	17M	100	Yes	Yes
11_2010_0658	#	#	100	Unknown parents	Unknown parents
11_2010_0659	#	#	100	Unknown parents	Unknown parents
11_2010_0660	#	#	100	Unknown parents	Unknown parents
11_2010_0661	#	#	100	Unknown parents	Unknown parents
11_2010_0662	#	11M	100	Hybrid	Hybrid
11_2010_0663	17M	17M	100	Yes	Yes
11_2010_0664	#	#	100	Unknown parents	Unknown parents
11_2010_0665	17M	17M	100	Yes	Yes
11_2010_0666	#	#	100	Unknown parents	Unknown parents
11_2010_0667	#	#	100	Unknown parents	Unknown parents
11_2010_0668	#	#	100	Unknown parents	Unknown parents
11_2010_0669	#	#	69.48	Uncertain origin	Uncertain origin



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11_2010_0669	#	11M	15.78	Uncertain origin	Uncertain origin
11_2010_0669	11M	#	14.74	Uncertain origin	Uncertain origin
11_2010_0670	17M	17M	100	Yes	Yes
11_2010_0671	#	#	100	Unknown parents	Unknown parents
11_2010_0672	#	11M	100	Hybrid	Hybrid
11_2010_0673	8M	27M	50.64	Uncertain origin	Uncertain origin
11_2010_0673	27M	8M	49.36	Uncertain origin	Uncertain origin
11_2010_0674	8M	27M	50.64	Uncertain origin	Uncertain origin
11_2010_0674	27M	8M	49.36	Uncertain origin	Uncertain origin
11_2010_0675	13M	13M	100	Yes	Yes
11_2010_0676	13M	13M	100	Yes	Yes
11_2010_0677	12M	12M	100	Yes	Yes
11_2010_0678	12M	12M	98.12	Uncertain origin	Yes
11_2010_0678	22M	22M	1.88	Uncertain origin	-
11_2010_0679	22M	22M	100	Yes	Yes
11_2010_0680	12M	12M	97.8	Uncertain origin	Yes
11_2010_0680	22M	22M	2.2	Uncertain origin	-
11_2010_0683	8M	8M	100	Yes	Yes
11_2010_0684	#	11M	100	Hybrid	Hybrid
11_2010_0685	#	8M	50.32	Uncertain origin	Uncertain origin
11_2010_0685	8M	#	49.68	Uncertain origin	Uncertain origin
11_2010_0686	8M	27M	50.64	Uncertain origin	Uncertain origin
11_2010_0686	27M	8M	49.36	Uncertain origin	Uncertain origin
11_2010_0687	17M	17M	100	Yes	Yes
11_2010_0688	#	#	100	Unknown parents	Unknown parents
11_2010_0689	17M	17M	100	Yes	Yes
11_2010_0690	17M	17M	100	Yes	Yes
11_2010_0691	12M	12M	100	Yes	Yes
11_2010_0692	12M	12M	100	Yes	Yes
11_2010_0693	17M	17M	100	Yes	Yes
11_2010_0694	17M	17M	100	Yes	Yes
11_2010_0695	#	11M	100	Hybrid	Hybrid
11_2010_0696	#	11M	100	Hybrid	Hybrid
11_2010_0697	#	#	100	Unknown parents	Unknown parents
11_2010_0698	#	#	100	Unknown parents	Unknown parents
11_2010_0699	#	#	100	Unknown parents	Unknown parents
11_2010_0701	17M	17M	100	Yes	Yes
11_2010_0702	#	#	100	Unknown parents	Unknown parents



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11_2010_0703	#	#	100	Unknown parents	Unknown parents
11_2010_0704	#	#	100	Unknown parents	Unknown parents
11_2010_0705	#	#	100	Unknown parents	Unknown parents
11_2010_0706	#	#	100	Unknown parents	Unknown parents
11_2010_0707	#	#	100	Unknown parents	Unknown parents
11_2010_0708	#	#	100	Unknown parents	Unknown parents
11_2010_0709	#	#	100	Unknown parents	Unknown parents
11_2010_0710	17M	17M	100	Yes	Yes
11_2010_0711	17M	17M	100	Yes	Yes
11_2010_0712	#	#	100	Unknown parents	Unknown parents
11_2010_0713	#	#	100	Unknown parents	Unknown parents
11_2010_0714	17M	17M	100	Yes	Yes
11_2010_0716	17M	17M	100	Yes	Yes
11_2010_0717	#	#	100	Unknown parents	Unknown parents
11_2010_0718	#	11M	100	Hybrid	Hybrid
11_2010_0719	#	#	100	Unknown parents	Unknown parents
11_2010_0720	#	#	100	Unknown parents	Unknown parents
11_2010_0721	#	#	100	Unknown parents	Unknown parents
11_2010_0722	#	#	100	Unknown parents	Unknown parents
11_2010_0723	#	#	100	Unknown parents	Unknown parents
11_2010_0724	#	#	100	Unknown parents	Unknown parents
11_2010_0725	#	#	100	Unknown parents	Unknown parents
11_2010_0726	17M	17M	100	Yes	Yes
11_2010_0727	#	#	100	Unknown parents	Unknown parents
11_2010_0728	17M	17M	100	Yes	Yes
11_2010_0730	#	11M	100	Hybrid	Hybrid
11_2010_0731	#	#	100	Unknown parents	Unknown parents
11_2010_0732	#	11M	100	Hybrid	Hybrid
11_2010_0733	#	#	100	Unknown parents	Unknown parents
11_2010_0734	15M	15M	100	Yes	Yes
11_2010_0735	#	11M	100	Hybrid	Hybrid
11_2010_0736	#	11M	100	Hybrid	Hybrid
11_2010_0737	9M	9M	100	Yes	Yes
11_2010_0739	#	#	100	Unknown parents	Unknown parents
11_2010_0740	#	#	100	Unknown parents	Unknown parents
11_2010_0741	8M	8M	100	Yes	Yes
11_2010_0742	13M	#	50.97	Uncertain origin	Uncertain origin
11_2010_0742	#	13M	49.03	Uncertain origin	Uncertain origin



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11_2010_0743	#	#	100	Unknown parents	Unknown parents
11_2010_0744	17M	17M	100	Yes	Yes
11_2010_0745	17M	17M	100	Yes	Yes
11_2010_0746	#	#	100	Unknown parents	Unknown parents
11_2010_0747	#	#	100	Unknown parents	Unknown parents
11_2010_0748	17M	17M	100	Yes	Yes
11_2010_0749	#	10M	53.22	Uncertain origin	Uncertain origin
11_2010_0749	10M	#	46.78	Uncertain origin	Uncertain origin
11_2010_0750	#	#	100	Unknown parents	Unknown parents
11_2010_0751	#	#	100	Unknown parents	Unknown parents
11_2010_0752	#	#	100	Unknown parents	Unknown parents
11_2010_0753	#	#	100	Unknown parents	Unknown parents
11_2010_0754	#	#	100	Unknown parents	Unknown parents
11_2010_0755	#	#	100	Unknown parents	Unknown parents
11_2010_0756	#	#	100	Unknown parents	Unknown parents
11_2010_0757	17M	17M	100	Yes	Yes
11_2010_0758	17M	17M	100	Yes	Yes
11_2010_0759	#	#	100	Unknown parents	Unknown parents
11_2010_0760	17M	17M	100	Yes	Yes
11_2010_0761	#	#	100	Unknown parents	Unknown parents
11_2010_0762	17M	17M	100	Yes	Yes
11_2010_0763	17M	17M	100	Yes	Yes
11_2010_0764	8M	8M	100	Yes	Yes
11_2010_0765	#	11M	100	Hybrid	Hybrid
11_2010_0766	#	11M	100	Hybrid	Hybrid
11_2010_0767	#	11M	100	Hybrid	Hybrid
11_2010_0768	9M	9M	100	Yes	Yes
11_2010_0769	9M	9M	100	Yes	Yes
11_2010_0774	8M	11M	100	Yes	Yes
11_2010_0775	10M	10M	100	Yes	Yes
11_2010_0776	9M	9M	100	Yes	Yes
11_2010_0777	10M	10M	100	Yes	Yes
11_2010_0782	#	11M	100	Hybrid	Hybrid
11_2010_0783	#	11M	100	Hybrid	Hybrid
11_2010_0784	10M	10M	100	Yes	Yes
11_2010_0785	#	#	100	Unknown parents	Unknown parents
11_2010_0790	#	11M	100	Hybrid	Hybrid
12_2019_0792	12M	12M	100	Yes	Yes



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12_2019_0793	12M	12M	100	Yes	Yes
12_2019_0798	12M	12M	100	Yes	Yes
12_2019_0799	12M	12M	100	Yes	Yes
12_2019_0800	12M	12M	100	Yes	Yes
12_2019_0801	12M	12M	100	Yes	Yes
12_2019_0806	12M	12M	99.27	Yes	Yes
12_2019_0807	12M	12M	100	Yes	Yes
12_2019_0808	12M	12M	100	Yes	Yes
12_2019_0809	12M	12M	100	Yes	Yes
12_2019_0814	8M	8M	100	Yes	Yes
12_2019_0815	#	12M	100	Hybrid	Hybrid
12_2019_0816	#	12M	100	Hybrid	Hybrid
12_2019_0817	8M	8M	100	Yes	Yes
12_2019_0818	8M	8M	100	Yes	Yes
12_2019_0819	12M	12M	99.04	Yes	Yes
12_2019_0820	#	12M	100	Hybrid	Hybrid
12_2019_0821	12M	12M	100	Yes	Yes
12_2019_0822	12M	12M	100	Yes	Yes
12_2019_0823	#	12M	100	Hybrid	Hybrid
12_2019_0824	#	12M	100	Hybrid	Hybrid
12_2019_0827	#	12M	100	Hybrid	Hybrid
12_2019_0828	12M	12M	100	Yes	Yes
12_2019_0829	12M	12M	100	Yes	Yes
12_2019_0830	12M	12M	100	Yes	Yes
12_2019_0831	12M	12M	100	Yes	Yes
12_2019_0832	12M	12M	100	Yes	Yes
12_2019_0833	12M	12M	100	Yes	Yes
12_2019_0834	12M	12M	100	Yes	Yes
12_2019_0835	12M	12M	100	Yes	Yes
12_2019_0836	12M	12M	98.45	Uncertain origin	Yes
12_2019_0836	22M	22M	1.55	Uncertain origin	-
12_2019_0837	12M	12M	100	Yes	Yes
12_2019_0838	12M	12M	100	Yes	Yes
12_2019_0839	22M	22M	100	Yes	Yes
12_2019_0840	12M	12M	100	Yes	Yes
12_2019_0841	12M	12M	100	Yes	Yes
12_2019_0842	12M	12M	100	Yes	Yes
12_2019_0843	12M	12M	100	Yes	Yes



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12_2019_0844	12M	12M	100	Yes	Yes
12_2019_0845	12M	12M	100	Yes	Yes
12_2019_0846	12M	12M	100	Yes	Yes
12_2019_0847	12M	12M	100	Yes	Yes
12_2019_0848	12M	12M	100	Yes	Yes
12_2019_0849	22M	22M	100	Yes	Yes
12_2019_0850	12M	12M	100	Yes	Yes
12_2019_0851	12M	12M	100	Yes	Yes
12_2019_0852	12M	12M	100	Yes	Yes
12_2019_0853	12M	12M	100	Yes	Yes
12_2019_0854	#	12M	100	Hybrid	Hybrid
12_2019_0855	12M	12M	100	Yes	Yes
12_2019_0856	12M	12M	100	Yes	Yes
12_2019_0857	12M	12M	100	Yes	Yes
12_2019_0858	12M	12M	100	Yes	Yes
12_2019_0859	12M	12M	100	Yes	Yes
12_2019_0860	12M	12M	100	Yes	Yes
12_2019_0861	12M	12M	100	Yes	Yes
12_2019_0862	12M	12M	100	Yes	Yes
12_2019_0863	12M	12M	100	Yes	Yes
12_2019_0864	12M	12M	100	Yes	Yes
12_2019_0865	22M	22M	100	Yes	Yes
12_2019_0866	12M	12M	100	Yes	Yes
12_2019_0867	12M	12M	100	Yes	Yes
12_2019_0868	12M	12M	100	Yes	Yes
12_2019_0870	12M	12M	100	Yes	Yes
12_2019_0872	12M	12M	100	Yes	Yes
12_2019_0873	12M	12M	100	Yes	Yes
12_2019_0874	12M	12M	99.9	Yes	Yes
12_2019_0875	12M	12M	100	Yes	Yes
12_2019_0876	#	#	57.31	Uncertain origin	Uncertain origin
12_2019_0876	30M	30M	42.69	Uncertain origin	Uncertain origin
12_2019_0877	12M	12M	100	Yes	Yes
12_2019_0878	#	12M	100	Hybrid	Hybrid
12_2019_0879	7M	12M	100	Yes	Yes
12_2019_0880	12M	12M	100	Yes	Yes
12_2019_0881	12M	12M	100	Yes	Yes
12_2019_0882	12M	12M	100	Yes	Yes



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12_2019_0883	8M	8M	100	Yes	Yes
12_2019_0884	12M	12M	100	Yes	Yes
12_2019_0885	12M	12M	100	Yes	Yes
12_2019_0886	13M	#	50.97	Uncertain origin	Uncertain origin
12_2019_0886	#	13M	49.03	Uncertain origin	Uncertain origin
12_2019_0887	12M	12M	100	Yes	Yes
12_2019_0888	12M	12M	100	Yes	Yes
12_2019_0889	12M	12M	100	Yes	Yes
12_2019_0890	12M	12M	100	Yes	Yes
12_2019_0891	12M	12M	100	Yes	Yes
12_2019_0892	12M	12M	99.87	Yes	Yes
12_2019_0893	12M	12M	100	Yes	Yes
12_2019_0894	12M	12M	100	Yes	Yes
12_2019_0895	12M	12M	100	Yes	Yes
12_2019_0896	12M	12M	100	Yes	Yes
12_2019_0897	12M	12M	100	Yes	Yes
12_2019_0898	#	12M	100	Hybrid	Hybrid
12_2019_0899	12M	12M	100	Yes	Yes
12_2019_0900	8M	8M	100	Yes	Yes
12_2019_0901	12M	12M	100	Yes	Yes
12_2019_0902	12M	12M	100	Yes	Yes
12_2019_0903	12M	12M	100	Yes	Yes
12_2019_0904	12M	12M	100	Yes	Yes
12_2019_0905	12M	12M	100	Yes	Yes
12_2019_0906	12M	12M	100	Yes	Yes
12_2019_0907	12M	12M	100	Yes	Yes
12_2019_0908	12M	12M	100	Yes	Yes
12_2019_0909	12M	12M	100	Yes	Yes
12_2019_0910	12M	12M	100	Yes	Yes
12_2019_0911	12M	12M	100	Yes	Yes
12_2019_0912	12M	12M	100	Yes	Yes
12_2019_0913	12M	12M	100	Yes	Yes
12_2019_0914	12M	12M	100	Yes	Yes
12_2019_0915	#	#	57.31	Uncertain origin	Uncertain origin
12_2019_0915	30M	30M	42.69	Uncertain origin	Uncertain origin
12_2019_0916	12M	12M	100	Yes	Yes
12_2019_0917	12M	12M	100	Yes	Yes
12_2019_0918	12M	12M	100	Yes	Yes



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12_2019_0919	12M	12M	100	Yes	Yes
12_2019_0920	12M	12M	100	Yes	Yes
12_2019_0921	12M	12M	100	Yes	Yes
12_2019_0922	12M	12M	100	Yes	Yes
12_2019_0923	12M	12M	100	Yes	Yes
12_2019_0924	12M	12M	100	Yes	Yes
12_2019_0925	12M	12M	100	Yes	Yes
12_2019_0926	8M	8M	100	Yes	Yes
12_2019_0927	12M	12M	100	Yes	Yes
12_2019_0928	7M	12M	100	Yes	Yes
12_2019_0930	12M	12M	100	Yes	Yes
12_2019_0931	12M	12M	98.37	Uncertain origin	Yes
12_2019_0931	22M	22M	1.63	Uncertain origin	-
12_2019_0932	12M	12M	100	Yes	Yes
12_2019_0933	12M	12M	100	Yes	Yes
12_2019_0934	12M	12M	100	Yes	Yes
12_2019_0935	12M	12M	100	Yes	Yes
12_2019_0936	12M	12M	100	Yes	Yes
12_2019_0938	12M	12M	100	Yes	Yes
12_2019_0939	12M	12M	100	Yes	Yes
12_2019_0940	12M	12M	100	Yes	Yes
13_2008_0941	#	13M	100	Hybrid	Hybrid
13_2008_0942	17M	17M	100	Yes	Yes
13_2008_0943	#	13M	100	Hybrid	Hybrid
13_2008_0945	#	13M	100	Hybrid	Hybrid
13_2008_0946	17M	17M	100	Yes	Yes
13_2008_0947	#	13M	100	Hybrid	Hybrid
13_2008_0948	17M	17M	100	Yes	Yes
13_2008_0949	#	13M	100	Hybrid	Hybrid
13_2008_0950	#	13M	100	Hybrid	Hybrid
13_2008_0951	#	13M	100	Hybrid	Hybrid
13_2008_0952	#	#	100	Unknown parents	Unknown parents
13_2008_0953	17M	17M	100	Yes	Yes
13_2008_0954	#	13M	100	Hybrid	Hybrid
13_2008_0955	#	13M	100	Hybrid	Hybrid
13_2008_0956	#	13M	100	Hybrid	Hybrid
13_2008_0957	#	13M	100	Hybrid	Hybrid
13_2008_0958	#	13M	100	Hybrid	Hybrid



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13_2008_0959	#	13M	100	Hybrid	Hybrid
13_2008_0960	#	13M	100	Hybrid	Hybrid
13_2008_0961	#	13M	100	Hybrid	Hybrid
13_2008_0962	#	#	100	Unknown parents	Unknown parents
13_2008_0963	17M	17M	100	Yes	Yes
13_2008_0964	#	13M	100	Hybrid	Hybrid
13_2008_0965	17M	17M	100	Yes	Yes
13_2008_0966	#	13M	100	Hybrid	Hybrid
13_2008_0967	#	13M	100	Hybrid	Hybrid
13_2008_0968	#	13M	100	Hybrid	Hybrid
13_2008_0969	#	13M	100	Hybrid	Hybrid
13_2008_0970	#	13M	100	Hybrid	Hybrid
13_2008_0971	#	13M	100	Hybrid	Hybrid
13_2008_0972	#	13M	100	Hybrid	Hybrid
13_2008_0973	17M	17M	100	Yes	Yes
13_2008_0974	#	#	100	Unknown parents	Unknown parents
13_2008_0975	#	13M	100	Hybrid	Hybrid
13_2008_0976	#	#	100	Unknown parents	Unknown parents
13_2008_0977	#	13M	100	Hybrid	Hybrid
13_2008_0978	#	13M	100	Hybrid	Hybrid
13_2008_0980	#	13M	100	Hybrid	Hybrid
13_2008_0981	#	13M	100	Hybrid	Hybrid
13_2008_0982	#	#	100	Unknown parents	Unknown parents
13_2008_0983	#	#	100	Unknown parents	Unknown parents
13_2008_0984	#	13M	100	Hybrid	Hybrid
13_2008_0985	#	13M	100	Hybrid	Hybrid
13_2008_0986	#	13M	100	Hybrid	Hybrid
13_2008_0987	#	13M	100	Hybrid	Hybrid
13_2008_0988	2M	13M	100	Yes	Yes
13_2008_0989	#	13M	100	Hybrid	Hybrid
13_2008_0990	#	13M	100	Hybrid	Hybrid
13_2008_0991	13M	13M	100	Yes	Yes
13_2008_0993	#	#	100	Unknown parents	Unknown parents
13_2008_0994	#	13M	100	Hybrid	Hybrid
13_2008_0995	#	13M	100	Hybrid	Hybrid
13_2008_0996	#	13M	100	Hybrid	Hybrid
13_2008_0997	#	13M	100	Hybrid	Hybrid
13_2008_0998	#	13M	100	Hybrid	Hybrid



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13_2008_0999	#	#	100	Unknown parents	Unknown parents
13_2008_1000	#	13M	100	Hybrid	Hybrid
13_2008_1001	#	13M	100	Hybrid	Hybrid
13_2008_1002	#	#	100	Unknown parents	Unknown parents
13_2008_1003	#	13M	100	Hybrid	Hybrid
13_2008_1004	#	#	100	Unknown parents	Unknown parents
13_2008_1005	#	#	100	Unknown parents	Unknown parents
13_2008_1007	17M	17M	100	Yes	Yes
13_2008_1008	#	13M	100	Hybrid	Hybrid
13_2008_1009	#	13M	100	Hybrid	Hybrid
13_2008_1010	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1010	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1011	#	13M	100	Hybrid	Hybrid
13_2008_1012	#	13M	100	Hybrid	Hybrid
13_2008_1013	#	13M	100	Hybrid	Hybrid
13_2008_1014	17M	17M	100	Yes	Yes
13_2008_1015	#	13M	100	Hybrid	Hybrid
13_2008_1016	#	13M	100	Hybrid	Hybrid
13_2008_1017	17M	17M	100	Yes	Yes
13_2008_1018	#	13M	100	Hybrid	Hybrid
13_2008_1019	#	13M	100	Hybrid	Hybrid
13_2008_1020	17M	17M	100	Yes	Yes
13_2008_1021	#	13M	100	Hybrid	Hybrid
13_2008_1022	#	13M	100	Hybrid	Hybrid
13_2008_1023	#	13M	100	Hybrid	Hybrid
13_2008_1024	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1024	#	30M	21.77	Uncertain origin	Uncertain origin
13_2008_1024	30M	#	20.93	Uncertain origin	Uncertain origin
13_2008_1025	17M	17M	100	Yes	Yes
13_2008_1026	#	13M	100	Hybrid	Hybrid
13_2008_1027	#	#	100	Unknown parents	Unknown parents
13_2008_1028	#	13M	100	Hybrid	Hybrid
13_2008_1029	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1029	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1030	#	13M	100	Hybrid	Hybrid
13_2008_1031	#	13M	100	Hybrid	Hybrid
13_2008_1032	#	#	100	Unknown parents	Unknown parents
13_2008_1033	#	#	100	Unknown parents	Unknown parents



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13_2008_1034	#	13M	100	Hybrid	Hybrid
13_2008_1035	#	13M	100	Hybrid	Hybrid
13_2008_1036	#	#	100	Unknown parents	Unknown parents
13_2008_1037	#	13M	100	Hybrid	Hybrid
13_2008_1039	#	13M	100	Hybrid	Hybrid
13_2008_1040	#	#	100	Unknown parents	Unknown parents
13_2008_1041	#	13M	100	Hybrid	Hybrid
13_2008_1042	#	#	100	Unknown parents	Unknown parents
13_2008_1043	17M	17M	100	Yes	Yes
13_2008_1044	#	13M	100	Hybrid	Hybrid
13_2008_1045	#	13M	100	Hybrid	Hybrid
13_2008_1046	17M	17M	100	Yes	Yes
13_2008_1050	#	#	100	Unknown parents	Unknown parents
13_2008_1051	#	13M	100	Hybrid	Hybrid
13_2008_1052	#	13M	100	Hybrid	Hybrid
13_2008_1054	#	13M	100	Hybrid	Hybrid
13_2008_1055	#	13M	57.31	Uncertain origin	Uncertain origin
13_2008_1055	30M	13M	42.69	Uncertain origin	Uncertain origin
13_2008_1056	#	13M	100	Hybrid	Hybrid
13_2008_1057	#	13M	57.31	Uncertain origin	Uncertain origin
13_2008_1057	30M	13M	42.69	Uncertain origin	Uncertain origin
13_2008_1058	#	13M	100	Hybrid	Hybrid
13_2008_1059	#	13M	57.31	Uncertain origin	Uncertain origin
13_2008_1059	30M	13M	42.69	Uncertain origin	Uncertain origin
13_2008_1060	17M	17M	100	Yes	Yes
13_2008_1062	#	13M	100	Hybrid	Hybrid
13_2008_1063	17M	17M	100	Yes	Yes
13_2008_1064	#	#	100	Unknown parents	Unknown parents
13_2008_1121	13M	13M	100	Yes	Yes
13_2008_1123	#	13M	100	Hybrid	Hybrid
13_2008_1124	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1124	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1125	#	13M	100	Hybrid	Hybrid
13_2008_1126	#	13M	100	Hybrid	Hybrid
13_2008_1127	13M	13M	100	Yes	Yes
13_2008_1128	13M	13M	100	Yes	Yes
13_2008_1129	13M	13M	100	Yes	Yes
13_2008_1130	#	13M	100	Hybrid	Hybrid



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13_2008_1131	13M	13M	100	Yes	Yes
13_2008_1132	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1132	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1133	#	13M	100	Hybrid	Hybrid
13_2008_1134	13M	13M	100	Yes	Yes
13_2008_1135	#	13M	100	Hybrid	Hybrid
13_2008_1136	13M	13M	100	Yes	Yes
13_2008_1137	#	13M	100	Hybrid	Hybrid
13_2008_1138	13M	13M	100	Yes	Yes
13_2008_1139	#	13M	100	Hybrid	Hybrid
13_2008_1141	#	13M	100	Hybrid	Hybrid
13_2008_1142	#	#	100	Unknown parents	Unknown parents
13_2008_1143	17M	17M	100	Yes	Yes
13_2008_1144	#	13M	100	Hybrid	Hybrid
13_2008_1145	#	13M	100	Hybrid	Hybrid
13_2008_1146	#	13M	100	Hybrid	Hybrid
13_2008_1147	13M	13M	100	Yes	Yes
13_2008_1148	#	13M	100	Hybrid	Hybrid
13_2008_1149	#	13M	100	Hybrid	Hybrid
13_2008_1150	13M	13M	100	Yes	Yes
13_2008_1151	#	13M	100	Hybrid	Hybrid
13_2008_1152	#	13M	100	Hybrid	Hybrid
13_2008_1153	#	13M	100	Hybrid	Hybrid
13_2008_1154	13M	13M	100	Yes	Yes
13_2008_1155	13M	13M	100	Yes	Yes
13_2008_1156	13M	13M	100	Yes	Yes
13_2008_1157	#	#	100	Unknown parents	Unknown parents
13_2008_1158	#	13M	100	Hybrid	Hybrid
13_2008_1159	#	13M	100	Hybrid	Hybrid
13_2008_1160	#	13M	100	Hybrid	Hybrid
13_2008_1161	#	13M	100	Hybrid	Hybrid
13_2008_1162	#	#	100	Unknown parents	Unknown parents
13_2008_1163	13M	13M	100	Yes	Yes
13_2008_1164	7M	13M	100	Yes	Yes
13_2008_1165	13M	13M	100	Yes	Yes
13_2008_1166	#	13M	100	Hybrid	Hybrid
13_2008_1167	#	13M	100	Hybrid	Hybrid
13_2008_1168	13M	13M	100	Yes	Yes



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13_2008_1169	#	13M	100	Hybrid	Hybrid
13_2008_1170	#	13M	100	Hybrid	Hybrid
13_2008_1171	#	13M	100	Hybrid	Hybrid
13_2008_1173	13M	13M	100	Yes	Yes
13_2008_1174	13M	13M	100	Yes	Yes
13_2008_1175	#	#	100	Unknown parents	Unknown parents
13_2008_1176	#	13M	100	Hybrid	Hybrid
13_2008_1177	13M	13M	100	Yes	Yes
13_2008_1178	17M	17M	100	Yes	Yes
13_2008_1179	#	13M	100	Hybrid	Hybrid
13_2008_1180	13M	13M	100	Yes	Yes
13_2008_1181	13M	13M	100	Yes	Yes
13_2008_1182	#	13M	100	Hybrid	Hybrid
13_2008_1183	17M	17M	100	Yes	Yes
13_2008_1184	13M	13M	100	Yes	Yes
13_2008_1185	#	13M	100	Hybrid	Hybrid
13_2008_1186	13M	13M	100	Yes	Yes
13_2008_1187	13M	13M	100	Yes	Yes
13_2008_1188	13M	13M	100	Yes	Yes
13_2008_1189	#	13M	100	Hybrid	Hybrid
13_2008_1190	#	13M	100	Hybrid	Hybrid
13_2008_1191	#	13M	100	Hybrid	Hybrid
13_2008_1192	#	13M	100	Hybrid	Hybrid
13_2008_1193	13M	13M	100	Yes	Yes
13_2008_1194	#	13M	100	Hybrid	Hybrid
13_2008_1195	#	13M	100	Hybrid	Hybrid
13_2008_1196	13M	13M	100	Yes	Yes
13_2008_1197	#	13M	100	Hybrid	Hybrid
13_2008_1198	#	13M	100	Hybrid	Hybrid
13_2008_1199	#	#	100	Unknown parents	Unknown parents
13_2008_1200	#	13M	100	Hybrid	Hybrid
13_2008_1201	13M	13M	100	Yes	Yes
13_2008_1202	13M	13M	100	Yes	Yes
13_2008_1203	13M	13M	100	Yes	Yes
13_2008_1204	#	13M	100	Hybrid	Hybrid
13_2008_1205	13M	13M	100	Yes	Yes
13_2008_1206	#	13M	100	Hybrid	Hybrid
13_2008_1207	13M	13M	100	Yes	Yes



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13_2008_1208	#	13M	100	Hybrid	Hybrid
13_2008_1209	13M	13M	100	Yes	Yes
13_2008_1210	#	13M	100	Hybrid	Hybrid
13_2008_1211	#	13M	100	Hybrid	Hybrid
13_2008_1212	#	13M	100	Hybrid	Hybrid
13_2008_1213	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1213	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1214	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1214	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1215	#	13M	100	Hybrid	Hybrid
13_2008_1216	#	13M	100	Hybrid	Hybrid
13_2008_1217	#	13M	100	Hybrid	Hybrid
13_2008_1218	13M	13M	100	Yes	Yes
13_2008_1219	#	13M	100	Hybrid	Hybrid
13_2008_1220	#	13M	100	Hybrid	Hybrid
13_2008_1221	#	13M	100	Hybrid	Hybrid
13_2008_1222	13M	13M	100	Yes	Yes
13_2008_1223	#	13M	100	Hybrid	Hybrid
13_2008_1224	13M	13M	100	Yes	Yes
13_2008_1225	#	13M	100	Hybrid	Hybrid
13_2008_1226	#	13M	100	Hybrid	Hybrid
13_2008_1227	13M	13M	100	Yes	Yes
13_2008_1228	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1228	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1229	13M	13M	100	Yes	Yes
13_2008_1230	12M	12M	100	Yes	Yes
13_2008_1231	13M	13M	100	Yes	Yes
13_2008_1232	13M	13M	100	Yes	Yes
13_2008_1233	13M	13M	100	Yes	Yes
13_2008_1234	#	13M	100	Hybrid	Hybrid
13_2008_1235	13M	13M	100	Yes	Yes
13_2008_1236	13M	13M	100	Yes	Yes
13_2008_1237	#	13M	100	Hybrid	Hybrid
13_2008_1238	13M	13M	100	Yes	Yes
13_2008_1239	#	13M	100	Hybrid	Hybrid
13_2008_1240	#	13M	100	Hybrid	Hybrid
13_2008_1241	13M	13M	100	Yes	Yes
13_2008_1242	#	13M	100	Hybrid	Hybrid



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13_2008_1243	#	13M	57.31	Uncertain origin	Uncertain origin
13_2008_1243	30M	13M	42.69	Uncertain origin	Uncertain origin
13_2008_1244	13M	13M	100	Yes	Yes
13_2008_1245	13M	13M	100	Yes	Yes
13_2008_1246	13M	13M	100	Yes	Yes
13_2008_1247	#	13M	100	Hybrid	Hybrid
13_2008_1248	#	#	100	Unknown parents	Unknown parents
13_2008_1249	13M	13M	100	Yes	Yes
13_2008_1250	#	13M	100	Hybrid	Hybrid
13_2008_1251	#	#	100	Unknown parents	Unknown parents
13_2008_1252	#	13M	100	Hybrid	Hybrid
13_2008_1253	17M	17M	100	Yes	Yes
13_2008_1254	#	#	100	Unknown parents	Unknown parents
13_2008_1255	#	13M	100	Hybrid	Hybrid
13_2008_1256	#	#	100	Unknown parents	Unknown parents
13_2008_1257	#	#	100	Unknown parents	Unknown parents
13_2008_1258	#	13M	100	Hybrid	Hybrid
13_2008_1259	#	13M	100	Hybrid	Hybrid
13_2008_1260	#	13M	100	Hybrid	Hybrid
13_2008_1261	#	#	100	Unknown parents	Unknown parents
13_2008_1262	#	13M	100	Hybrid	Hybrid
13_2008_1263	#	#	100	Unknown parents	Unknown parents
13_2008_1264	#	13M	100	Hybrid	Hybrid
13_2008_1265	#	13M	100	Hybrid	Hybrid
13_2008_1266	13M	13M	100	Yes	Yes
13_2008_1267	13M	13M	100	Yes	Yes
13_2008_1268	#	13M	100	Hybrid	Hybrid
13_2008_1269	13M	13M	100	Yes	Yes
13_2008_1270	#	13M	100	Hybrid	Hybrid
13_2008_1271	13M	13M	100	Yes	Yes
13_2008_1274	#	13M	100	Hybrid	Hybrid
13_2008_1275	13M	13M	100	Yes	Yes
13_2008_1276	#	13M	100	Hybrid	Hybrid
13_2008_1277	13M	13M	100	Yes	Yes
13_2008_1278	13M	13M	100	Yes	Yes
13_2008_1279	#	#	100	Unknown parents	Unknown parents
13_2008_1280	13M	13M	100	Yes	Yes
13_2008_1281	13M	13M	100	Yes	Yes



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13_2008_1282	#	13M	100	Hybrid	Hybrid
13_2008_1283	13M	13M	100	Yes	Yes
13_2008_1284	13M	13M	100	Yes	Yes
13_2008_1285	13M	13M	100	Yes	Yes
13_2008_1286	13M	13M	100	Yes	Yes
13_2008_1287	#	13M	100	Hybrid	Hybrid
13_2008_1288	13M	13M	100	Yes	Yes
13_2008_1290	12M	12M	100	Yes	Yes
13_2008_1291	12M	12M	98.71	Uncertain origin	Yes
13_2008_1291	22M	22M	1.29	Uncertain origin	-
13_2008_1292	13M	13M	100	Yes	Yes
13_2008_1293	#	13M	100	Hybrid	Hybrid
13_2008_1294	12M	12M	100	Yes	Yes
13_2008_1295	13M	13M	100	Yes	Yes
13_2008_1296	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1296	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1297	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1297	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1298	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1298	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1299	13M	13M	100	Yes	Yes
13_2008_1300	13M	13M	100	Yes	Yes
13_2008_1301	13M	13M	100	Yes	Yes
13_2008_1302	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1302	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1303	13M	13M	100	Yes	Yes
13_2008_1304	#	#	100	Unknown parents	Unknown parents
13_2008_1305	13M	13M	100	Yes	Yes
13_2008_1306	13M	13M	100	Yes	Yes
13_2008_1307	13M	13M	100	Yes	Yes
13_2008_1308	13M	13M	100	Yes	Yes
13_2008_1309	#	13M	100	Hybrid	Hybrid
13_2008_1310	10M	10M	100	Yes	Yes
13_2008_1311	#	13M	100	Hybrid	Hybrid
13_2008_1312	#	13M	100	Hybrid	Hybrid
13_2008_1313	13M	13M	100	Yes	Yes
13_2008_1314	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1314	30M	30M	42.69	Uncertain origin	Uncertain origin



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13_2008_1315	#	13M	100	Hybrid	Hybrid
13_2008_1316	#	13M	100	Hybrid	Hybrid
13_2008_1317	13M	13M	100	Yes	Yes
13_2008_1318	#	13M	100	Hybrid	Hybrid
13_2008_1319	12M	12M	100	Yes	Yes
13_2008_1320	13M	13M	100	Yes	Yes
13_2008_1321	#	#	100	Unknown parents	Unknown parents
13_2008_1322	#	13M	100	Hybrid	Hybrid
13_2008_1323	#	13M	100	Hybrid	Hybrid
13_2008_1324	13M	13M	100	Yes	Yes
13_2008_1325	#	13M	100	Hybrid	Hybrid
13_2008_1326	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1326	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1327	#	13M	100	Hybrid	Hybrid
13_2008_1328	13M	13M	100	Yes	Yes
13_2008_1329	#	13M	100	Hybrid	Hybrid
13_2008_1330	12M	12M	100	Yes	Yes
13_2008_1331	#	#	100	Unknown parents	Unknown parents
13_2008_1332	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1332	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1333	13M	13M	100	Yes	Yes
13_2008_1334	#	13M	100	Hybrid	Hybrid
13_2008_1335	17M	17M	100	Yes	Yes
13_2008_1336	13M	13M	100	Yes	Yes
13_2008_1337	13M	13M	100	Yes	Yes
13_2008_1338	13M	13M	100	Yes	Yes
13_2008_1339	13M	13M	100	Yes	Yes
13_2008_1340	13M	13M	100	Yes	Yes
13_2008_1341	#	13M	100	Hybrid	Hybrid
13_2008_1342	#	13M	57.31	Uncertain origin	Uncertain origin
13_2008_1342	30M	13M	42.69	Uncertain origin	Uncertain origin
13_2008_1343	13M	13M	100	Yes	Yes
13_2008_1345	12M	12M	100	Yes	Yes
13_2008_1346	#	13M	100	Hybrid	Hybrid
13_2008_1347	#	13M	100	Hybrid	Hybrid
13_2008_1348	13M	13M	100	Yes	Yes
13_2008_1349	13M	13M	100	Yes	Yes
13_2008_1350	#	#	100	Unknown parents	Unknown parents



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13_2008_1351	17M	17M	100	Yes	Yes
13_2008_1353	#	13M	100	Hybrid	Hybrid
13_2008_1354	27M	#	54.13	Uncertain origin	Uncertain origin
13_2008_1354	#	27M	45.87	Uncertain origin	Uncertain origin
13_2008_1355	#	13M	100	Hybrid	Hybrid
13_2008_1356	13M	13M	100	Yes	Yes
13_2008_1357	13M	13M	100	Yes	Yes
13_2008_1358	#	13M	100	Hybrid	Hybrid
13_2008_1359	13M	13M	100	Yes	Yes
13_2008_1360	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1360	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1361	#	13M	100	Hybrid	Hybrid
13_2008_1362	17M	17M	100	Yes	Yes
13_2008_1363	12M	12M	100	Yes	Yes
13_2008_1364	13M	13M	100	Yes	Yes
13_2008_1365	17M	17M	100	Yes	Yes
13_2008_1366	#	13M	57.31	Uncertain origin	Uncertain origin
13_2008_1366	30M	13M	42.69	Uncertain origin	Uncertain origin
13_2008_1367	10M	10M	100	Yes	Yes
13_2008_1368	#	13M	57.31	Uncertain origin	Uncertain origin
13_2008_1368	30M	13M	42.69	Uncertain origin	Uncertain origin
13_2008_1369	10M	10M	100	Yes	Yes
13_2008_1370	13M	13M	100	Yes	Yes
13_2008_1371	#	13M	100	Hybrid	Hybrid
13_2008_1372	#	13M	100	Hybrid	Hybrid
13_2008_1373	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1373	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1374	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1374	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1375	12M	12M	100	Yes	Yes
13_2008_1376	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1376	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1377	#	13M	100	Hybrid	Hybrid
13_2008_1378	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1378	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1379	7M	7M	100	Yes	Yes
13_2008_1380	13M	13M	100	Yes	Yes
13_2008_1381	13M	13M	100	Yes	Yes



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13_2008_1382	17M	17M	100	Yes	Yes
13_2008_1383	13M	13M	100	Yes	Yes
13_2008_1384	13M	13M	100	Yes	Yes
13_2008_1385	#	13M	100	Hybrid	Hybrid
13_2008_1386	#	13M	100	Hybrid	Hybrid
13_2008_1388	#	13M	100	Hybrid	Hybrid
13_2008_1389	13M	13M	100	Yes	Yes
13_2008_1390	8M	13M	83.52	Uncertain origin	Uncertain origin
13_2008_1390	#	13M	16.48	Uncertain origin	Uncertain origin
13_2008_1391	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1391	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1392	#	#	100	Unknown parents	Unknown parents
13_2008_1393	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1393	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1394	12M	13M	100	Yes	Yes
13_2008_1395	#	13M	100	Hybrid	Hybrid
13_2008_1396	12M	12M	100	Yes	Yes
13_2008_1398	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1398	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1399	12M	12M	100	Yes	Yes
13_2008_1400	12M	12M	99.91	Yes	Yes
13_2008_1401	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1401	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1402	#	13M	100	Hybrid	Hybrid
13_2008_1403	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1403	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1404	#	13M	100	Hybrid	Hybrid
13_2008_1405	12M	12M	99.93	Yes	Yes
13_2008_1406	12M	13M	100	Yes	Yes
13_2008_1408	12M	13M	100	Yes	Yes
13_2008_1409	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1409	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1410	17M	17M	100	Yes	Yes
13_2008_1411	17M	17M	100	Yes	Yes
13_2008_1412	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1412	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1413	12M	13M	100	Yes	Yes
13_2008_1414	12M	12M	100	Yes	Yes



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13_2008_1415	17M	17M	99.79	Yes	Yes
13_2008_1416	#	13M	100	Hybrid	Hybrid
13_2008_1417	12M	12M	100	Yes	Yes
13_2008_1418	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1418	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1419	#	#	74.72	Uncertain origin	Uncertain origin
13_2008_1419	17M	17M	25.28	Uncertain origin	Uncertain origin
13_2008_1420	12M	13M	100	Yes	Yes
13_2008_1421	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1421	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1422	#	#	100	Unknown parents	Unknown parents
13_2008_1423	12M	12M	100	Yes	Yes
13_2008_1424	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1424	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1426	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1426	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1428	12M	12M	100	Yes	Yes
13_2008_1429	12M	12M	98.56	Uncertain origin	Yes
13_2008_1429	22M	22M	1.44	Uncertain origin	-
13_2008_1430	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1430	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1431	#	13M	57.31	Uncertain origin	Uncertain origin
13_2008_1431	30M	13M	42.69	Uncertain origin	Uncertain origin
13_2008_1432	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1432	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1433	#	13M	100	Hybrid	Hybrid
13_2008_1435	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1435	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1436	17M	17M	85.32	Uncertain origin	Uncertain origin
13_2008_1436	#	#	14.68	Uncertain origin	Uncertain origin
13_2008_1437	22M	22M	100	Yes	Yes
13_2008_1438	#	13M	100	Hybrid	Hybrid
13_2008_1439	12M	12M	100	Yes	Yes
13_2008_1440	12M	12M	100	Yes	Yes
13_2008_1441	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1441	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1443	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1443	30M	30M	42.69	Uncertain origin	Uncertain origin



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13_2008_1444	#	13M	100	Hybrid	Hybrid
13_2008_1445	#	13M	57.31	Uncertain origin	Uncertain origin
13_2008_1445	30M	13M	42.69	Uncertain origin	Uncertain origin
13_2008_1446	#	13M	100	Hybrid	Hybrid
13_2008_1447	#	13M	57.31	Uncertain origin	Uncertain origin
13_2008_1447	30M	13M	42.69	Uncertain origin	Uncertain origin
13_2008_1448	#	13M	100	Hybrid	Hybrid
13_2008_1449	12M	13M	100	Yes	Yes
13_2008_1450	#	#	100	Unknown parents	Unknown parents
13_2008_1451	#	13M	100	Hybrid	Hybrid
13_2008_1453	#	13M	100	Hybrid	Hybrid
13_2008_1454	#	13M	100	Hybrid	Hybrid
13_2008_1455	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1455	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1456	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1456	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1457	12M	13M	100	Yes	Yes
13_2008_1458	12M	12M	100	Yes	Yes
13_2008_1459	#	13M	57.31	Uncertain origin	Uncertain origin
13_2008_1459	30M	13M	42.69	Uncertain origin	Uncertain origin
13_2008_1460	#	13M	100	Hybrid	Hybrid
13_2008_1461	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1461	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1462	12M	12M	100	Yes	Yes
13_2008_1463	#	#	100	Unknown parents	Unknown parents
13_2008_1464	#	13M	100	Hybrid	Hybrid
13_2008_1465	#	13M	100	Hybrid	Hybrid
13_2008_1466	#	13M	100	Hybrid	Hybrid
13_2008_1467	#	#	57.31	Uncertain origin	Uncertain origin
13_2008_1467	30M	30M	42.69	Uncertain origin	Uncertain origin
13_2008_1468	#	13M	100	Hybrid	Hybrid
13_2008_1469	17M	17M	100	Yes	Yes
13_2008_1470	17M	17M	100	Yes	Yes
13_2008_1471	#	13M	100	Hybrid	Hybrid
13_2008_1472	#	13M	100	Hybrid	Hybrid
13_2008_1473	#	13M	100	Hybrid	Hybrid
13_2008_1474	12M	12M	100	Yes	Yes
13_2008_1475	17M	17M	100	Yes	Yes



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13_2008_1476	17M	17M	100	Yes	Yes
13_2008_1477	17M	17M	100	Yes	Yes
13_2008_1478	27M	13M	100	Yes	Yes
13_2008_1479	10M	10M	100	Yes	Yes
13_2008_1480	13M	13M	100	Yes	Yes
21_2008_1481	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1481	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1482	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1482	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1483	12M	12M	100	Yes	Yes
21_2008_1484	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1484	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1485	12M	12M	100	Yes	Yes
21_2008_1486	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1486	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1487	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1487	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1488	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1488	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1489	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1489	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1491	12M	12M	100	Yes	Yes
21_2008_1492	12M	12M	100	Yes	Yes
21_2008_1493	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1493	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1494	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1494	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1495	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1495	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1496	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1496	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1497	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1497	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1600	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1600	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1608	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1608	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1609	#	#	57.31	Uncertain origin	Uncertain origin



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21_2008_1609	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1610	12M	12M	100	Yes	Yes
21_2008_1614	12M	12M	100	Yes	Yes
21_2008_1615	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1615	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1616	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1616	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1618	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1618	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1619	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1619	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1622	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1622	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1623	12M	12M	99.97	Yes	Yes
21_2008_1627	12M	12M	99.62	Yes	Yes
21_2008_1628	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1628	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1632	12M	12M	100	Yes	Yes
21_2008_1635	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1635	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1636	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1636	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1637	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1637	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1640	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1640	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1641	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1641	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1643	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1643	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1647	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1647	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1648	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1648	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1649	12M	12M	99.95	Yes	Yes
21_2008_1650	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1650	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1651	12M	12M	100	Yes	Yes



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21_2008_1652	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1652	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1653	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1653	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1654	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1654	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1655	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1655	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1656	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1656	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1658	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1658	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2008_1659	#	#	57.31	Uncertain origin	Uncertain origin
21_2008_1659	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2016_1661	22M	22M	100	Yes	Yes
21_2016_1662	12M	12M	100	Yes	Yes
21_2016_1663	#	#	57.31	Uncertain origin	Uncertain origin
21_2016_1663	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2016_1664	12M	12M	100	Yes	Yes
21_2016_1665	12M	12M	100	Yes	Yes
21_2016_1666	12M	12M	99.9	Yes	Yes
21_2016_1667	#	#	55.73	Uncertain origin	Uncertain origin
21_2016_1667	#	21M	24.22	Uncertain origin	Uncertain origin
21_2016_1667	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1668	12M	12M	100	Yes	Yes
21_2016_1669	#	21M	100	Hybrid	Hybrid
21_2016_1670	12M	12M	100	Yes	Yes
21_2016_1671	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1671	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1671	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1672	#	21M	100	Hybrid	Hybrid
21_2016_1673	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1673	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1673	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1674	12M	12M	100	Yes	Yes
21_2016_1675	12M	12M	99.67	Yes	Yes
21_2016_1676	12M	12M	98.89	Uncertain origin	Yes
21_2016_1676	22M	22M	1.11	Uncertain origin	-



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21_2016_1677	12M	12M	99.97	Yes	Yes
21_2016_1678	12M	12M	100	Yes	Yes
21_2016_1679	12M	12M	99.28	Yes	Yes
21_2016_1680	12M	12M	99.64	Yes	Yes
21_2016_1681	12M	12M	100	Yes	Yes
21_2016_1682	12M	12M	100	Yes	Yes
21_2016_1683	12M	12M	100	Yes	Yes
21_2016_1684	12M	12M	100	Yes	Yes
21_2016_1685	12M	12M	100	Yes	Yes
21_2016_1686	12M	12M	99.96	Yes	Yes
21_2016_1687	12M	12M	98.1	Uncertain origin	Yes
21_2016_1687	22M	22M	1.9	Uncertain origin	-
21_2016_1688	12M	12M	100	Yes	Yes
21_2016_1689	12M	12M	100	Yes	Yes
21_2016_1690	12M	12M	100	Yes	Yes
21_2016_1691	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1691	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1691	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1692	12M	12M	100	Yes	Yes
21_2016_1693	12M	12M	100	Yes	Yes
21_2016_1694	12M	12M	100	Yes	Yes
21_2016_1695	12M	12M	100	Yes	Yes
21_2016_1696	12M	12M	99.96	Yes	Yes
21_2016_1697	12M	#	28.69	Uncertain origin	Uncertain origin
21_2016_1697	#	12M	28.61	Uncertain origin	Uncertain origin
21_2016_1697	30M	12M	23.25	Uncertain origin	Uncertain origin
21_2016_1697	12M	30M	19.44	Uncertain origin	Uncertain origin
21_2016_1698	12M	12M	100	Yes	Yes
21_2016_1699	12M	12M	98.67	Uncertain origin	Yes
21_2016_1699	22M	22M	1.33	Uncertain origin	-
21_2016_1700	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1700	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1700	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1701	12M	12M	100	Yes	Yes
21_2016_1702	12M	#	28.69	Uncertain origin	Uncertain origin
21_2016_1702	#	12M	28.61	Uncertain origin	Uncertain origin
21_2016_1702	30M	12M	23.25	Uncertain origin	Uncertain origin
21_2016_1702	12M	30M	19.44	Uncertain origin	Uncertain origin



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21_2016_1703	12M	12M	100	Yes	Yes
21_2016_1704	#	21M	100	Hybrid	Hybrid
21_2016_1705	12M	12M	100	Yes	Yes
21_2016_1706	12M	12M	100	Yes	Yes
21_2016_1707	12M	12M	100	Yes	Yes
21_2016_1708	12M	12M	100	Yes	Yes
21_2016_1709	12M	12M	100	Yes	Yes
21_2016_1710	12M	12M	100	Yes	Yes
21_2016_1711	12M	12M	100	Yes	Yes
21_2016_1712	22M	22M	100	Yes	Yes
21_2016_1713	12M	12M	100	Yes	Yes
21_2016_1714	12M	12M	100	Yes	Yes
21_2016_1715	12M	12M	100	Yes	Yes
21_2016_1716	12M	12M	100	Yes	Yes
21_2016_1717	12M	12M	100	Yes	Yes
21_2016_1718	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1718	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1718	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1719	12M	12M	99.78	Yes	Yes
21_2016_1720	12M	12M	100	Yes	Yes
21_2016_1721	12M	12M	100	Yes	Yes
21_2016_1722	12M	12M	100	Yes	Yes
21_2016_1723	12M	12M	99.96	Yes	Yes
21_2016_1724	12M	12M	100	Yes	Yes
21_2016_1725	12M	12M	100	Yes	Yes
21_2016_1726	12M	12M	99.97	Yes	Yes
21_2016_1727	12M	12M	100	Yes	Yes
21_2016_1728	12M	12M	99.97	Yes	Yes
21_2016_1730	12M	12M	99.97	Yes	Yes
21_2016_1731	12M	12M	100	Yes	Yes
21_2016_1732	12M	12M	99.97	Yes	Yes
21_2016_1733	12M	12M	100	Yes	Yes
21_2016_1734	9M	9M	100	Yes	Yes
21_2016_1735	12M	12M	100	Yes	Yes
21_2016_1736	12M	12M	100	Yes	Yes
21_2016_1737	12M	12M	96.23	Uncertain origin	Yes
21_2016_1737	22M	22M	3.77	Uncertain origin	-
21_2016_1738	12M	12M	100	Yes	Yes



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21_2016_1739	12M	12M	100	Yes	Yes
21_2016_1740	12M	12M	99.9	Yes	Yes
21_2016_1741	22M	22M	100	Yes	Yes
21_2016_1743	9M	9M	100	Yes	Yes
21_2016_1744	12M	12M	100	Yes	Yes
21_2016_1745	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1745	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1745	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1746	12M	12M	100	Yes	Yes
21_2016_1747	#	21M	100	Hybrid	Hybrid
21_2016_1748	12M	#	28.69	Uncertain origin	Uncertain origin
21_2016_1748	#	12M	28.61	Uncertain origin	Uncertain origin
21_2016_1748	30M	12M	23.25	Uncertain origin	Uncertain origin
21_2016_1748	12M	30M	19.44	Uncertain origin	Uncertain origin
21_2016_1750	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1750	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1750	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1751	22M	22M	100	Yes	Yes
21_2016_1752	12M	12M	98.24	Uncertain origin	Yes
21_2016_1752	22M	22M	1.76	Uncertain origin	-
21_2016_1753	12M	12M	100	Yes	Yes
21_2016_1754	12M	12M	100	Yes	Yes
21_2016_1755	12M	12M	99.96	Yes	Yes
21_2016_1756	12M	12M	100	Yes	Yes
21_2016_1757	22M	22M	100	Yes	Yes
21_2016_1758	12M	12M	100	Yes	Yes
21_2016_1759	12M	#	28.69	Uncertain origin	Uncertain origin
21_2016_1759	#	12M	28.61	Uncertain origin	Uncertain origin
21_2016_1759	30M	12M	23.25	Uncertain origin	Uncertain origin
21_2016_1759	12M	30M	19.44	Uncertain origin	Uncertain origin
21_2016_1760	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1760	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1760	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1761	12M	12M	100	Yes	Yes
21_2016_1762	12M	12M	100	Yes	Yes
21_2016_1763	12M	#	28.69	Uncertain origin	Uncertain origin
21_2016_1763	#	12M	28.61	Uncertain origin	Uncertain origin
21_2016_1763	30M	12M	23.25	Uncertain origin	Uncertain origin



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21_2016_1763	12M	30M	19.44	Uncertain origin	Uncertain origin
21_2016_1764	12M	12M	100	Yes	Yes
21_2016_1765	12M	12M	100	Yes	Yes
21_2016_1766	12M	12M	100	Yes	Yes
21_2016_1767	12M	12M	99.81	Yes	Yes
21_2016_1768	12M	12M	100	Yes	Yes
21_2016_1769	#	#	57.31	Uncertain origin	Uncertain origin
21_2016_1769	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2016_1770	#	#	57.31	Uncertain origin	Uncertain origin
21_2016_1770	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2016_1771	#	#	57.31	Uncertain origin	Uncertain origin
21_2016_1771	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2016_1772	12M	12M	99.91	Yes	Yes
21_2016_1773	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1773	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1773	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1774	12M	#	28.69	Uncertain origin	Uncertain origin
21_2016_1774	#	12M	28.61	Uncertain origin	Uncertain origin
21_2016_1774	30M	12M	23.25	Uncertain origin	Uncertain origin
21_2016_1774	12M	30M	19.44	Uncertain origin	Uncertain origin
21_2016_1775	12M	12M	100	Yes	Yes
21_2016_1776	12M	12M	99.97	Yes	Yes
21_2016_1777	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1777	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1777	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1778	12M	12M	100	Yes	Yes
21_2016_1779	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1779	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1779	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1780	22M	22M	100	Yes	Yes
21_2016_1781	12M	12M	99.96	Yes	Yes
21_2016_1782	12M	12M	100	Yes	Yes
21_2016_1783	12M	12M	100	Yes	Yes
21_2016_1784	12M	12M	99.93	Yes	Yes
21_2016_1785	22M	22M	100	Yes	Yes
21_2016_1786	12M	12M	100	Yes	Yes
21_2016_1787	12M	12M	100	Yes	Yes
21_2016_1788	12M	12M	100	Yes	Yes



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21_2016_1789	12M	12M	100	Yes	Yes
21_2016_1790	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1790	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1790	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1791	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1791	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1791	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1792	12M	12M	100	Yes	Yes
21_2016_1793	12M	12M	100	Yes	Yes
21_2016_1794	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1794	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1794	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1795	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1795	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1795	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1796	12M	12M	100	Yes	Yes
21_2016_1797	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1797	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1797	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1798	12M	12M	99.94	Yes	Yes
21_2016_1799	22M	22M	100	Yes	Yes
21_2016_1800	12M	12M	100	Yes	Yes
21_2016_1801	12M	12M	100	Yes	Yes
21_2016_1802	22M	22M	100	Yes	Yes
21_2016_1803	12M	12M	100	Yes	Yes
21_2016_1804	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1804	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1804	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1805	22M	22M	100	Yes	Yes
21_2016_1806	12M	12M	100	Yes	Yes
21_2016_1807	12M	12M	100	Yes	Yes
21_2016_1808	12M	12M	100	Yes	Yes
21_2016_1810	12M	12M	100	Yes	Yes
21_2016_1811	12M	12M	99.67	Yes	Yes
21_2016_1812	12M	12M	100	Yes	Yes
21_2016_1813	12M	12M	99.87	Yes	Yes
21_2016_1814	12M	12M	100	Yes	Yes
21_2016_1815	#	#	55.82	Uncertain origin	Uncertain origin



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21_2016_1815	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1815	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1816	22M	22M	100	Yes	Yes
21_2016_1817	12M	12M	100	Yes	Yes
21_2016_1818	12M	12M	100	Yes	Yes
21_2016_1819	12M	12M	100	Yes	Yes
21_2016_1820	12M	12M	100	Yes	Yes
21_2016_1821	#	#	54.39	Uncertain origin	Uncertain origin
21_2016_1821	#	21M	24.73	Uncertain origin	Uncertain origin
21_2016_1821	21M	#	20.88	Uncertain origin	Uncertain origin
21_2016_1822	22M	22M	100	Yes	Yes
21_2016_1823	12M	#	28.69	Uncertain origin	Uncertain origin
21_2016_1823	#	12M	28.61	Uncertain origin	Uncertain origin
21_2016_1823	30M	12M	23.25	Uncertain origin	Uncertain origin
21_2016_1823	12M	30M	19.44	Uncertain origin	Uncertain origin
21_2016_1824	12M	12M	98.96	Uncertain origin	Yes
21_2016_1824	22M	22M	1.04	Uncertain origin	-
21_2016_1825	12M	12M	100	Yes	Yes
21_2016_1826	12M	12M	100	Yes	Yes
21_2016_1827	12M	12M	100	Yes	Yes
21_2016_1828	12M	12M	100	Yes	Yes
21_2016_1829	22M	22M	100	Yes	Yes
21_2016_1831	12M	12M	97.96	Uncertain origin	Yes
21_2016_1831	22M	22M	2.04	Uncertain origin	-
21_2016_1832	12M	12M	100	Yes	Yes
21_2016_1833	#	#	57.31	Uncertain origin	Uncertain origin
21_2016_1833	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2016_1834	#	#	57.31	Uncertain origin	Uncertain origin
21_2016_1834	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2016_1835	#	#	55.82	Uncertain origin	Uncertain origin
21_2016_1835	#	21M	24.14	Uncertain origin	Uncertain origin
21_2016_1835	21M	#	20.04	Uncertain origin	Uncertain origin
21_2016_1836	#	#	57.31	Uncertain origin	Uncertain origin
21_2016_1836	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2016_1837	#	#	57.31	Uncertain origin	Uncertain origin
21_2016_1837	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2016_1838	#	#	57.31	Uncertain origin	Uncertain origin
21_2016_1838	30M	30M	42.69	Uncertain origin	Uncertain origin



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21_2016_1839	#	#	57.31	Uncertain origin	Uncertain origin
21_2016_1839	30M	30M	42.69	Uncertain origin	Uncertain origin
21_2016_1840	#	#	57.31	Uncertain origin	Uncertain origin
21_2016_1840	30M	30M	42.69	Uncertain origin	Uncertain origin
22_2009_1841	22M	22M	100	Yes	Yes
22_2009_1842	12M	12M	100	Yes	Yes
22_2009_1843	22M	22M	100	Yes	Yes
22_2009_1844	12M	12M	100	Yes	Yes
22_2009_1845	22M	22M	100	Yes	Yes
22_2009_1846	12M	12M	100	Yes	Yes
22_2009_1847	22M	22M	100	Yes	Yes
22_2009_1848	12M	12M	97.37	Uncertain origin	Yes
22_2009_1848	22M	22M	2.63	Uncertain origin	-
22_2009_1849	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1849	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1851	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1851	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1852	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1852	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1853	22M	22M	100	Yes	Yes
22_2009_1854	22M	22M	100	Yes	Yes
22_2009_1856	12M	12M	100	Yes	Yes
22_2009_1857	12M	12M	100	Yes	Yes
22_2009_1858	12M	12M	99.93	Yes	Yes
22_2009_1859	22M	22M	100	Yes	Yes
22_2009_1860	12M	12M	99.38	Yes	Yes
22_2009_1861	12M	12M	97.63	Uncertain origin	Yes
22_2009_1861	22M	22M	2.37	Uncertain origin	-
22_2009_1862	12M	12M	98.41	Uncertain origin	Yes
22_2009_1862	22M	22M	1.59	Uncertain origin	-
22_2009_1863	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1863	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1864	22M	22M	100	Yes	Yes
22_2009_1865	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1865	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1866	22M	22M	100	Yes	Yes
22_2009_1867	22M	22M	100	Yes	Yes
22_2009_1868	22M	22M	100	Yes	Yes



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22_2009_1869	22M	22M	100	Yes	Yes
22_2009_1870	22M	22M	100	Yes	Yes
22_2009_1871	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1871	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1872	12M	12M	100	Yes	Yes
22_2009_1873	12M	12M	98.54	Uncertain origin	Yes
22_2009_1873	22M	22M	1.46	Uncertain origin	-
22_2009_1874	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1874	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1875	22M	22M	100	Yes	Yes
22_2009_1876	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1876	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1877	12M	12M	100	Yes	Yes
22_2009_1878	12M	12M	100	Yes	Yes
22_2009_1879	22M	22M	100	Yes	Yes
22_2009_1880	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1880	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1881	12M	12M	97.75	Uncertain origin	Yes
22_2009_1881	22M	22M	2.25	Uncertain origin	-
22_2009_1882	22M	22M	100	Yes	Yes
22_2009_1883	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1883	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1884	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1884	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1885	22M	22M	100	Yes	Yes
22_2009_1887	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1887	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1888	22M	22M	100	Yes	Yes
22_2009_1889	12M	12M	100	Yes	Yes
22_2009_1890	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1890	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1892	22M	22M	100	Yes	Yes
22_2009_1893	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1893	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1894	22M	22M	100	Yes	Yes
22_2009_1895	22M	22M	100	Yes	Yes
22_2009_1896	12M	12M	100	Yes	Yes
22_2009_1897	12M	12M	97.05	Uncertain origin	Yes



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22_2009_1897	22M	22M	2.95	Uncertain origin	-
22_2009_1898	22M	22M	100	Yes	Yes
22_2009_1899	12M	12M	100	Yes	Yes
22_2009_1900	22M	22M	100	Yes	Yes
22_2009_1901	22M	22M	100	Yes	Yes
22_2009_1902	12M	12M	100	Yes	Yes
22_2009_1903	22M	22M	100	Yes	Yes
22_2009_1905	22M	22M	100	Yes	Yes
22_2009_1906	12M	12M	100	Yes	Yes
22_2009_1908	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1908	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1909	22M	22M	100	Yes	Yes
22_2009_1910	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1910	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1911	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1911	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1912	22M	22M	100	Yes	Yes
22_2009_1913	22M	22M	100	Yes	Yes
22_2009_1914	22M	22M	100	Yes	Yes
22_2009_1917	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1917	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1918	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1918	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1919	12M	12M	100	Yes	Yes
22_2009_1920	22M	22M	100	Yes	Yes
22_2009_1921	22M	22M	100	Yes	Yes
22_2009_1922	22M	22M	100	Yes	Yes
22_2009_1923	22M	22M	100	Yes	Yes
22_2009_1924	12M	12M	98.09	Uncertain origin	Yes
22_2009_1924	22M	22M	1.91	Uncertain origin	-
22_2009_1925	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1925	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1927	22M	22M	100	Yes	Yes
22_2009_1928	12M	12M	100	Yes	Yes
22_2009_1929	22M	22M	100	Yes	Yes
22_2009_1930	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1930	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1931	22M	22M	100	Yes	Yes



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22_2009_1933	22M	22M	100	Yes	Yes
22_2009_1934	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1934	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1935	22M	22M	100	Yes	Yes
22_2009_1936	12M	12M	98.42	Uncertain origin	Yes
22_2009_1936	22M	22M	1.58	Uncertain origin	-
22_2009_1937	22M	22M	100	Yes	Yes
22_2009_1938	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1938	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1939	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1939	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1940	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1940	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1941	22M	22M	100	Yes	Yes
22_2009_1942	22M	22M	100	Yes	Yes
22_2009_1943	22M	22M	100	Yes	Yes
22_2009_1944	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1944	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1945	12M	12M	100	Yes	Yes
22_2009_1946	12M	12M	100	Yes	Yes
22_2009_1947	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1947	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1948	22M	22M	100	Yes	Yes
22_2009_1949	22M	22M	100	Yes	Yes
22_2009_1950	22M	22M	100	Yes	Yes
22_2009_1951	12M	12M	99.83	Yes	Yes
22_2009_1954	22M	22M	100	Yes	Yes
22_2009_1955	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1955	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1956	22M	22M	100	Yes	Yes
22_2009_1957	22M	22M	100	Yes	Yes
22_2009_1958	22M	22M	100	Yes	Yes
22_2009_1959	22M	22M	100	Yes	Yes
22_2009_1960	22M	22M	100	Yes	Yes
22_2009_1961	22M	22M	100	Yes	Yes
22_2009_1962	22M	22M	100	Yes	Yes
22_2009_1963	12M	12M	100	Yes	Yes
22_2009_1964	22M	22M	100	Yes	Yes



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22_2009_1965	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1965	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1966	12M	12M	98.7	Uncertain origin	Yes
22_2009_1966	22M	22M	1.3	Uncertain origin	-
22_2009_1967	22M	22M	100	Yes	Yes
22_2009_1968	12M	12M	100	Yes	Yes
22_2009_1971	12M	12M	98.08	Uncertain origin	Yes
22_2009_1971	22M	22M	1.92	Uncertain origin	-
22_2009_1974	22M	22M	100	Yes	Yes
22_2009_1975	12M	12M	100	Yes	Yes
22_2009_1976	12M	12M	100	Yes	Yes
22_2009_1977	22M	22M	100	Yes	Yes
22_2009_1978	22M	22M	100	Yes	Yes
22_2009_1979	12M	12M	99.34	Yes	Yes
22_2009_1980	22M	22M	100	Yes	Yes
22_2009_1981	22M	22M	100	Yes	Yes
22_2009_1982	12M	12M	99.93	Yes	Yes
22_2009_1983	22M	22M	100	Yes	Yes
22_2009_1984	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1984	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1986	22M	22M	100	Yes	Yes
22_2009_1989	12M	12M	100	Yes	Yes
22_2009_1990	22M	22M	100	Yes	Yes
22_2009_1991	22M	22M	100	Yes	Yes
22_2009_1993	12M	12M	100	Yes	Yes
22_2009_1994	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1994	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1995	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_1995	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_1996	12M	12M	100	Yes	Yes
22_2009_1998	22M	22M	100	Yes	Yes
22_2009_1999	22M	22M	100	Yes	Yes
22_2009_2000	22M	22M	100	Yes	Yes
22_2009_2001	22M	22M	100	Yes	Yes
22_2009_2002	12M	12M	100	Yes	Yes
22_2009_2005	12M	12M	100	Yes	Yes
22_2009_2007	#	22M	100	Hybrid	Hybrid
22_2009_2008	22M	22M	100	Yes	Yes



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22_2009_2010	22M	22M	100	Yes	Yes
22_2009_2011	22M	22M	100	Yes	Yes
22_2009_2012	22M	22M	100	Yes	Yes
22_2009_2013	22M	22M	100	Yes	Yes
22_2009_2014	22M	22M	100	Yes	Yes
22_2009_2015	#	22M	57.31	Uncertain origin	Uncertain origin
22_2009_2015	30M	22M	42.69	Uncertain origin	Uncertain origin
22_2009_2020	22M	22M	100	Yes	Yes
27_2009_2021	#	#	57.31	Uncertain origin	Uncertain origin
27_2009_2021	30M	30M	42.69	Uncertain origin	Uncertain origin
27_2009_2022	#	#	57.31	Uncertain origin	Uncertain origin
27_2009_2022	30M	30M	42.69	Uncertain origin	Uncertain origin
27_2009_2023	#	27M	57.31	Uncertain origin	Uncertain origin
27_2009_2023	30M	27M	42.69	Uncertain origin	Uncertain origin
27_2009_2024	#	#	57.31	Uncertain origin	Uncertain origin
27_2009_2024	30M	30M	42.69	Uncertain origin	Uncertain origin
27_2009_2025	#	#	57.31	Uncertain origin	Uncertain origin
27_2009_2025	30M	30M	42.69	Uncertain origin	Uncertain origin
27_2009_2026	#	#	57.31	Uncertain origin	Uncertain origin
27_2009_2026	30M	30M	42.69	Uncertain origin	Uncertain origin
27_2009_2027	8M	8M	100	Yes	Yes
27_2009_2028	#	8M	51.89	Uncertain origin	Uncertain origin
27_2009_2028	8M	#	48.11	Uncertain origin	Uncertain origin
27_2009_2029	8M	8M	100	Yes	Yes
27_2009_2030	#	8M	50.32	Uncertain origin	Uncertain origin
27_2009_2030	8M	#	49.68	Uncertain origin	Uncertain origin
27_2009_2031	#	8M	49.6	Uncertain origin	Uncertain origin
27_2009_2031	8M	#	48.52	Uncertain origin	Uncertain origin
27_2009_2032	10M	8M	51.77	Uncertain origin	Uncertain origin
27_2009_2032	8M	10M	48.23	Uncertain origin	Uncertain origin
27_2009_2033	#	#	57.31	Uncertain origin	Uncertain origin
27_2009_2033	30M	30M	42.69	Uncertain origin	Uncertain origin
27_2009_2034	#	#	57.31	Uncertain origin	Uncertain origin
27_2009_2034	30M	30M	42.69	Uncertain origin	Uncertain origin
27_2009_2035	#	#	57.31	Uncertain origin	Uncertain origin
27_2009_2035	30M	30M	42.69	Uncertain origin	Uncertain origin
27_2009_2036	#	8M	50.32	Uncertain origin	Uncertain origin
27_2009_2036	8M	#	49.68	Uncertain origin	Uncertain origin



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27_2009_2037	8M	8M	100	Yes	Yes
27_2009_2038	#	8M	50.32	Uncertain origin	Uncertain origin
27_2009_2038	8M	#	49.68	Uncertain origin	Uncertain origin
27_2009_2039	23M	23M	100	Yes	Yes
27_2009_2040	#	8M	49.31	Uncertain origin	Uncertain origin
27_2009_2040	8M	#	47.95	Uncertain origin	Uncertain origin
27_2009_2040	13M	#	1.46	Uncertain origin	Uncertain origin
27_2009_2040	#	13M	1.28	Uncertain origin	Uncertain origin
27_2009_2041	#	8M	51.89	Uncertain origin	Uncertain origin
27_2009_2041	8M	#	48.11	Uncertain origin	Uncertain origin
27_2009_2042	8M	8M	100	Yes	Yes
27_2009_2043	8M	8M	100	Yes	Yes
27_2009_2044	#	8M	51.89	Uncertain origin	Uncertain origin
27_2009_2044	8M	#	48.11	Uncertain origin	Uncertain origin
27_2009_2045	#	8M	50.32	Uncertain origin	Uncertain origin
27_2009_2045	8M	#	49.68	Uncertain origin	Uncertain origin
27_2009_2046	#	8M	50.32	Uncertain origin	Uncertain origin
27_2009_2046	8M	#	49.68	Uncertain origin	Uncertain origin
27_2009_2047	8M	8M	100	Yes	Yes
27_2009_2048	8M	8M	100	Yes	Yes
27_2009_2049	8M	8M	100	Yes	Yes
27_2009_2050	8M	8M	100	Yes	Yes
27_2009_2051	#	27M	100	Hybrid	Hybrid
27_2009_2052	17M	17M	100	Yes	Yes
27_2009_2053	6M	6M	100	Yes	Yes
27_2009_2054	17M	17M	100	Yes	Yes
27_2009_2055	#	#	100	Unknown parents	Unknown parents
27_2009_2056	13M	13M	100	Yes	Yes
27_2009_2057	6M	6M	100	Yes	Yes
27_2009_2058	13M	13M	100	Yes	Yes
27_2009_2059	2M	2M	100	Yes	Yes
27_2009_2060	17M	17M	100	Yes	Yes
27_2009_2061	17M	17M	100	Yes	Yes
27_2009_2062	6M	6M	100	Yes	Yes
27_2009_2063	13M	13M	100	Yes	Yes
27_2009_2064	17M	17M	100	Yes	Yes
27_2009_2065	17M	17M	100	Yes	Yes
27_2009_2066	17M	17M	100	Yes	Yes



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27_2009_2067	6M	6M	100	Yes	Yes
27_2009_2068	2M	2M	100	Yes	Yes
27_2009_2069	12M	12M	100	Yes	Yes
27_2009_2070	12M	12M	100	Yes	Yes
27_2009_2071	#	27M	100	Hybrid	Hybrid
27_2009_2072	13M	13M	100	Yes	Yes
27_2009_2073	13M	13M	100	Yes	Yes
27_2009_2108	#	8M	50.32	Uncertain origin	Uncertain origin
27_2009_2108	8M	#	49.68	Uncertain origin	Uncertain origin
27_2009_2109	#	8M	50.32	Uncertain origin	Uncertain origin
27_2009_2109	8M	#	49.68	Uncertain origin	Uncertain origin
27_2009_2111	#	8M	50.32	Uncertain origin	Uncertain origin
27_2009_2111	8M	#	49.68	Uncertain origin	Uncertain origin
27_2009_2112	8M	#	51.67	Uncertain origin	Uncertain origin
27_2009_2112	#	8M	48.33	Uncertain origin	Uncertain origin
27_2009_2113	#	8M	51.89	Uncertain origin	Uncertain origin
27_2009_2113	8M	#	48.11	Uncertain origin	Uncertain origin
27_2009_2114	#	8M	51.89	Uncertain origin	Uncertain origin
27_2009_2114	8M	#	48.11	Uncertain origin	Uncertain origin
27_2009_2115	8M	8M	100	Yes	Yes
27_2009_2116	8M	8M	100	Yes	Yes
27_2009_2117	8M	#	52.73	Uncertain origin	Uncertain origin
27_2009_2117	#	8M	47.27	Uncertain origin	Uncertain origin
27_2009_2118	#	27M	100	Hybrid	Hybrid
27_2009_2119	13M	#	50.97	Uncertain origin	Uncertain origin
27_2009_2119	#	13M	49.03	Uncertain origin	Uncertain origin
27_2009_2120	7M	8M	51.71	Uncertain origin	Uncertain origin
27_2009_2120	8M	7M	48.29	Uncertain origin	Uncertain origin



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Table 7. Proportion of pure *Abies nebrodensis* seedlings growing at the nursery Piano Noce coming from selfing or outcrossing.

Type of seedling	Proportion
Seedlings originated by selfing	878 out of 897 (97.9%)
Seedlings originated by outcrossing of two <i>A nebrodensis</i>	19 out of 897 (2.1%)