

thecae). – (Mated young females remain in the mother colony over winter; perhaps due to low male number some gynes may be insufficiently inseminated).

Colony # 519 (coll. 15 March 2003): After a first laboratory summer the colony contained one queen of *T. curvispinosus* and > 10 females of *T. minutissimus*. On 22 September 2003 all remaining females of *T. minutissimus* were dissected ("A 7 bCc", one mated, egg-laying queen, 7 newly mated females, one virgin but egg-laying female, and one virgin female). The female of *T. curvispinosus* has been a reproductive queen (A).

Two young females of *T. minutissimus* were introduced (from col. # 884) on 9 October 2003. The colony unexpectedly reared numerous females of *T. curvispinosus* in fall conditions.

It was hibernated from 21 November 2003 until 3 March 2004 (three female pupae of *T. curvispinosus* seemingly had survived the winter, but disappeared during the first two weeks in spring conditions). The two young females of *T. minutissimus* (from # 884) had survived and grew fat.

The colony again reared numerous females of *T. curvispinosus* between 8 May and 2 June 2004. Then some female pupae of *T. minutissimus* appeared. Until 15 August 2004, a total of 65 females and 6 males of *T. minutissimus* were reared. – (Rearing of *T. minutissimus* after host sexuals; low sex ratio; probably rapid brood sexuals; mated females of *T. minutissimus* can be accepted in fall, though in already formerly parasitized colony).

Colony # 521 (coll. 15 March 2003): On 24 September 2003, after a first laboratory summer, all three remaining females of *T. minutissimus* were dissected. One was newly mated (b), two were in a state between b and A, just developing fertility and probably having already laid a few eggs.

Two females of *T. minutissimus* were put into the fornicary (from col. # 884), but were soon evicted.

After a hibernation (7 November 2003 to 3 March 2004), without adults of *T. minutissimus*, three other females of *T. minutissimus* (from col. # 883, hibernated in their mother nest) were successively added. Two were quickly evicted, but one remained in the nest and apparently reproduced there.

The colony reared numerous host species females, and when they began to leave for swarming, one male pupa and 6 female pupae of *T. minutissimus* appeared.

By 25 June 2004, one male and three females of *T. minutissimus* were recorded. When dissected, all three females proved newly mated (b). – (Intranidal mating; females of *T. minutissimus* in fall ejected from foreign host colony, in spring accepted; probably rapid brood sexuals; low male production).

Colony # 883 (coll. 10 April 2003): At the end of a first laboratory summer, on 18 September 2003, the colony comprised one queen of *T. curvispinosus* and numerous females, female pupae, and one male pupa of *T. minutissimus*. The colony was hibernated from 31 October 2003 to 3 March 2004. The host queen and about 10 females of *T. minutissimus* survived the winter.

In spring, females of *T. minutissimus* began to leave from the nest. Three were introduced into col. # 521, of which one apparently succeeded. One female was put into col. # 1034 where it was accepted, but died after seven weeks without having reproduced.

The colony reared a few females of the host species, then 5 females of *T. minutissimus*, and no males. – (IMOH; hibernated young females tend to leave for colony foundation in the spring; host species sexuals reared before the parasite sexuals).

Colony # 884 (coll. 10 April 2003): At the end of the first laboratory summer the colony on 18 September 2003 comprised a host queen, ca. 30 females and 4 pupae of *T. minutissimus*. On 24 September 2003 and 9 October 2003 a total of 26 females of *T. minutissimus* were dissected. Two females that appeared "fat" were "A", mated and egg-laying queens. 23 females were "b", newly mated, one was "c", virgin. Four females were used for colony foundation experiments (two in col. # 519 where they succeeded, two in col. # 521 where they failed). One female of *T. minutissimus* remained in the colony.

After a hibernation from 21 November 2003 to 3 March 2004, the remaining female of *T. minutissimus* grew fat. Numerous host workers were reared but no females of *T. curvispinosus*. By July 2004 a total of 4 females of *T. minutissimus* had been reared. – (Polygyny of *T. minutissimus*; intranidal mating).

Colony # 1256 (coll. 31 May 2003): After a first laboratory summer and a hibernation the colony contained no female of *T. minutissimus* but a queen of *T. curvispinosus* that was soon executed by its own workers. On 23 April 2004 one queen of *T. minutissimus* (if mated?; from # 884) was introduced. It survived until 2 July 2004 (for 9 weeks). The colony reared ca. 20 gynes *T. curvispinosus* and numerous males. – (Introducing female of *T. minutissimus* in spring succeeded).

Colony # 1268 (coll. 31 May 2003): On 28 July 2003 all females were dissected. Both, the two females of *T. curvispinosus* and the female of *T. minutissimus*, were mated and fully reproductive queens. – (Polygyny of host colony).