In this study, the proportion of *Abies bornmülleriana* trees infected by *Heterobasidion* spp. was investigated in Kastamonu Province in different types of stands. One 1 cm-thick disc was taken from each of 100 freshly cut trees, washed under a running tap, placed into plastic bags and incubated in growth chamber at 24°C for 7 days. The area occupied by the conidial stage of *Heterobasidion annosum* s.l. was determined under a stereomicroscope using transparent film placed onto the upper surface of each disc. During this investigation conidia of *Heterobasidion annosum* s.l. were taken with a needle and placed onto agar plates. The obtained isolates were identified with pairing tests and DNA-based methods. All 36 isolates responded as *Heterobasidion abietinum* to the tester isolates. Identification based on PCR amplification with MJF-MJR and KJF-KFR primers gave the same result. 34% (34 out of 100) of the discs taken from the fir forests were found to be infected with *H. abietinum*. The characteristics of the colonized patches on the discs indicated that the *H. abietinum* colonies originated from stem infections of the trees. The proportion of the disc area covered by the conidial stage of the fungus was 80% in one of the discs, 6-10% in 6 discs, 1-5% in 18 discs, and 0-1% in 11 discs. The conidiophores were observed in heartwood in only five samples.