ABSTRACT – Field experiments were conducted at the Agricultural Research Station, Bailhongal, University of Agricultural Sciences, Dharwad during *Kharif* 2006 and 2007 to assess crop loss due to stem fly in soybean under two dates of sowing. The level of stem fly incidence was higher up to flowering stage and extended up to harvesting stage with no much variation in the level of incidence. Among the treatments, seed treatment with thiamethoxam and foliar application of chemicals (T1 to T5) recorded significantly lower seedling mortality, stem fly incidence and stem tunnelling percentage compared to recommended package and untreated check. The T5 treatment (seed treatment with thiamethoxam – imidacloprid – chlorpyriphos– monocrotophos) recorded average higher seed yield of 24.44 and 19.38 q/ha in first and second dates of sowings, respectively. Whereas, the lower seed yield (16.33 and 11.47 q/ha) was recorded with untreated check in both the dates of sowing respectively. In first date of sowing the avoidable crop loss was more in thiamethoxam treated treatments and foliar application of chemicals (T1 to T5) which ranged from 27.16 to 33.40 per cent as compared to recommended package of practice (RPP) which recorded lowest avoidable crop loss of 5.91 per cent where as in second date of sowing the treatment T5 recorded highest of 40.81 per cent avoidable crop loss where as lowest of 24.56 per cent in RPP.

*Key words*: Stem fly incidence, Stem tunneling, thiamethoxam, imidacloprid