Larval densities of *Prodiamesa olivacea* were examined in the Laan stream for one year and matched against stream discharge and coarse organic detritus (COD) content of the sediments. The sediment grain size partitioning for the 12 monthly sampling dates was also assessed. The substrate was mainly composed of fine sand (high discharge periods) or silt (low discharge periods) and a never absent COD component which fluctuated seasonally within a narrow range. The discharge fluctuations showed some negative impact on densities of early instar *P. olivacea*. The absolute and relative densities of *P. olivacea* were high throughout most of the study period and showed emergence periods in April–May and September–October.