An experiment was conducted to use Bulked Segregant Analysis (BSA) technique to identify AFLP markers associated with photoperiod response in rice bean. Non photoperiod response and photoperiod response pools DNA from 14 plants each were chosen from a population of 150 F2 individuals resulted from a cross between CN800001, a photoperiod response line and Menaga, a non-photoperiod response line. From 221 primer pairs under study, there were 5 pairs showing 7 markers polymorphic between the parents and between the two DNA pools. TAC/CAG1 marker correlated well with the photoperiod response character, having the coefficient of determination (R²) of 27.80%. Thus this marker should link to a group of quantitative trait loci conditioning photoperiod response in rice bean.