Russian Wheat Aphid (RWA), Diuraphis noxia (Kurdjumov) is the most devastating pest of wheat in Turkey and also other important wheat producer country of the World. The pest is widely distributed in main wheat production areas of Turkey. During the survey in 2010, pest were not observed in herbicide applied wheat fields. This study was conducted based on that finding. Side effect tests and stock cultures of D. noxia were maintained in controlled climate room conditions in which 20±1°C, 16:8 photoperiod and 60 % relative humidity. Test plants were infested with 5 individuals for each at 2-4 leaf stage and after seven days herbicides were applied on them according to advised doses of the producer company. Evaluations were done before herbicides application and 3rd, 7th, 14th and 21st days after applications. After 21 days, plants were healthier in all herbicides applied groups when compare with the control groups. In terms of different evaluation criteria like chlorosis, rolling leaf and population level, 2,4 D Ester, Fenoxaprop-PEthyl, Tribenuron Methyl were negatively effected D. noxia and suppressed pest populations as from the 3rd days of applications. Statistical analyses show that, side effects of all herbicides were significantly important.