Considering the multi-mycotoxin Brazilian new regulation approved by the Health Ministry and published in February 2011 for several raw material and their by-products (some of them to be enforced in 2012, 2014, 2016), a work was carried out to find out possible mycotoxin, contamination in barley, grain utilized for malt preparation. A total of 187 samples of barley grown in the Parana State, Southern Brazil (collected from 2010 to 2011) was evaluated for: vomitoxin (deoxynivalenol-DON), aflatoxins (AFLs: AFB\textsubscript{1}, AFB\textsubscript{2}, AFG\textsubscript{1} and AFG\textsubscript{2}), zearalenone (ZON) and ocratoxin A (OTA). The methodologies applied were those based on enzyme linked immune-assay for DON and fluorimetry for AFLs, OTA and ZON. From all the samples analyzed, 12\% did not present any of those toxins contamination up to the limit of quantification (LOQ) of the methods applied (2 ng/mg for DON and 1,100 and 2 μg/kg for AFLs, ZON and OTA, respectively). On the other hand, 54\% presented some levels of contamination, however below the levels established by that regulation for DON (level enforced for 2012) and for ZON, 95\% attended that legislation (for 2012 enforced limits). Regarding AFLs and OTA, 98\% did not have contamination detected (<LOQ). For AFLs, that regulation has not established limits yet. In conclusion, for the samples evaluated during the 2010 and 2011 years, the values for AFLs and OTA were not significant, while the DON’s were the most important and representative.