

**Figure 32.** Histochemical localization of GUS expression in transgenic tobacco callus (**A**) and shoot (**B**) which were transformed with construct pITB441 (Nt.441) and in shoots transformed with construct pITB450 (**C**). The leaf from plant that transformed with pITB641 (**D**) or pITB650 (**E**). Note intensive GUS expression in guard cells. While leaf transformed with construct pITB750 (**F**) shown highest expression in vascular and lower in mesophyll tissues, in contrast leaf transformed with construct pITB450 (**G**) showed high expression in mesophyll cells and absent in vascular tissues. In the roots, expression of GUS gene is specific; the root transformed with construct pITB741 (**H**) or pITB750 (**I**) is high in vascular tissues, while with pITB541 (**J**) or pITB550 (**K**) expression was absent in the root hair (**RH**) and root elongation (**RE**) zone but more in root cap (**RC**). In pITB228 (**L**) GUS expression was present in the entire root tissue.