

Figure 1 – Hippocampus- investigated areas of hippocampus: CA1 and CA3 areas of the hippocampus, Hilus of the dentate gyrus, DB DG – dorsal blade of the dentate gyrus, VB DG – ventral blades of the dentate gyrus. NADPH-d staining. Direct magnification 40x. The microphotograph was made using the microscope OLYMPUS AX70 Provis with digital camera OLYMPUS DP70.

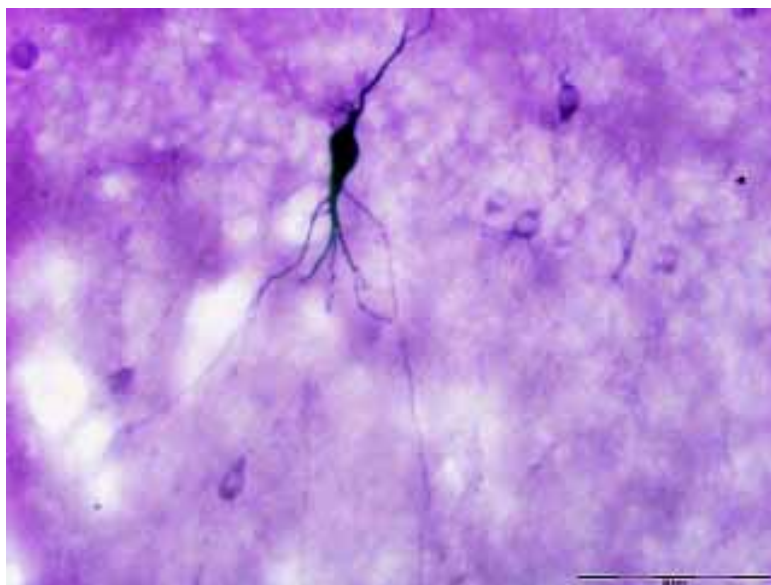
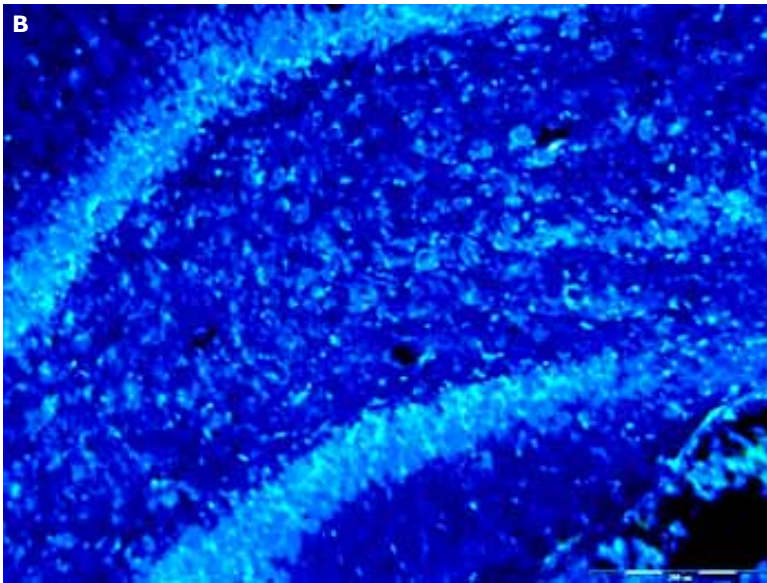
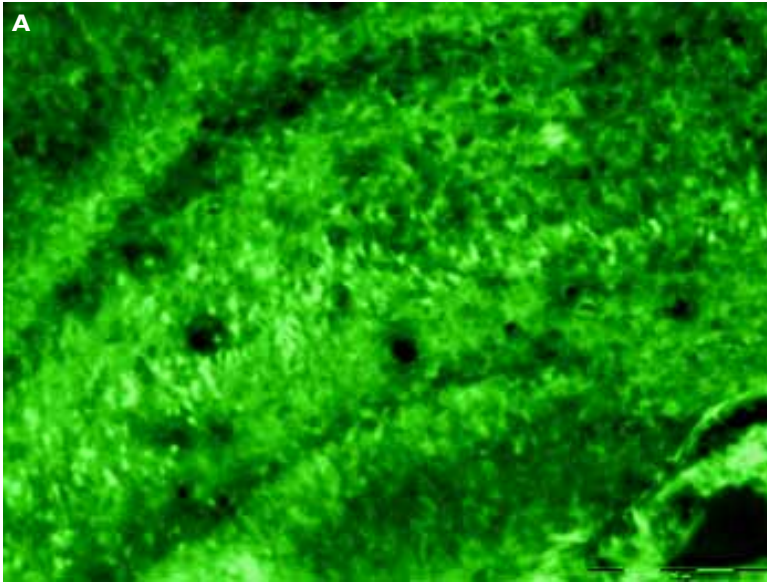


Figure 2 – NADPH-diaphorase positive cell in CA1 area of the hippocampus. Direct magnification 200x.



*Figure 3 – A: CA3 area of the hippocampus. Fluoro-Jade B staining. Kainic acid treated rat (10mg/kg). Direct magnification 100x. B: CA3 area of the hippocampus. Bis-benzimide, Hoechst 33342 staining. Kainic acid treated rat (10mg/kg). Direct magnification 100x.*

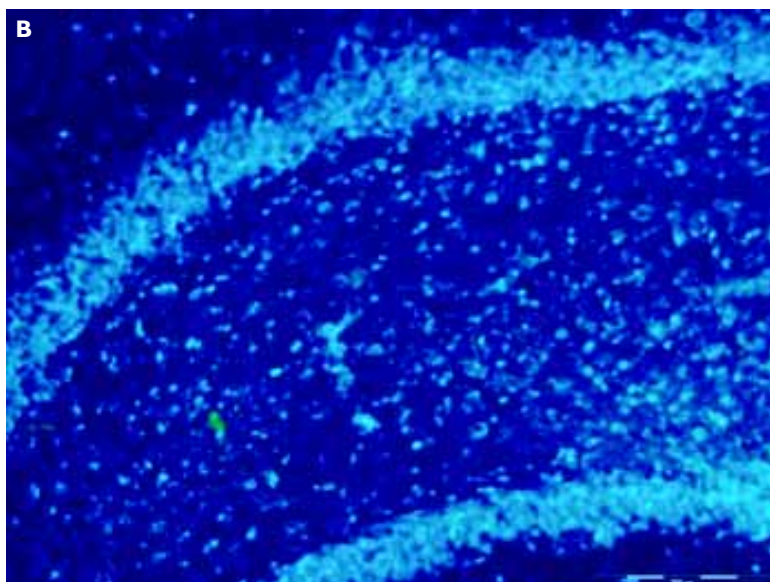
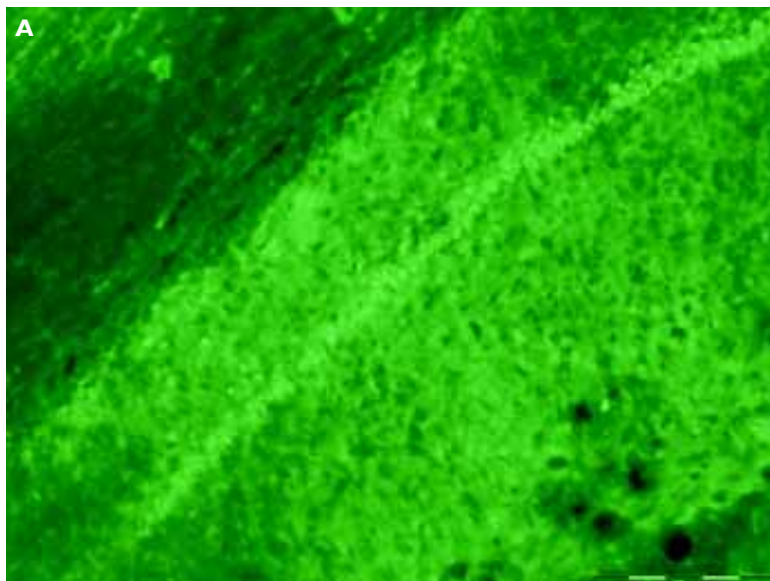


Figure 4 – A: CA1 area of the hippocampus. Fluoro-Jade B staining. Kainic acid treated rat (10mg/kg). Direct magnification 100x. B: CA1 area of the hippocampus. Bis-benzimide, Hoechst 33342 staining. Kainic acid treated rat (10mg/kg). Direct magnification 100x.



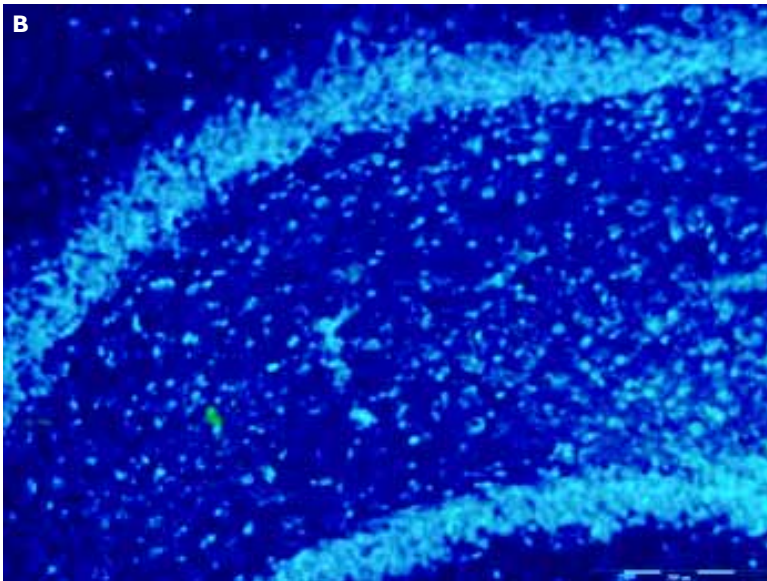
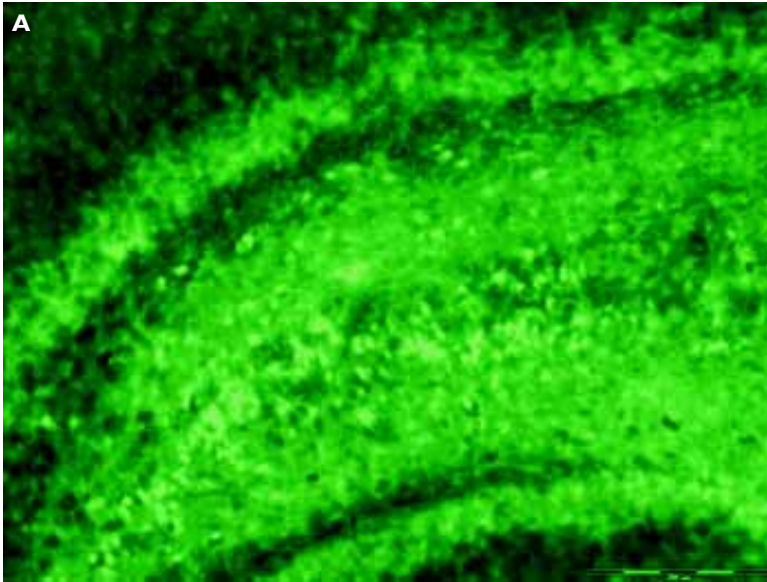


Figure 5 – A: Ventral and dorsal blades of the dentate gyrus. Fluoro-Jade B staining. Kainic acid treated rat (10mg/kg). Direct magnification 100x. B: Ventral and dorsal blades of the dentate gyrus. Bis-benzimide, Hoechst 33342 staining. Kainic acid treated rat (10mg/kg). Direct magnification 100x.

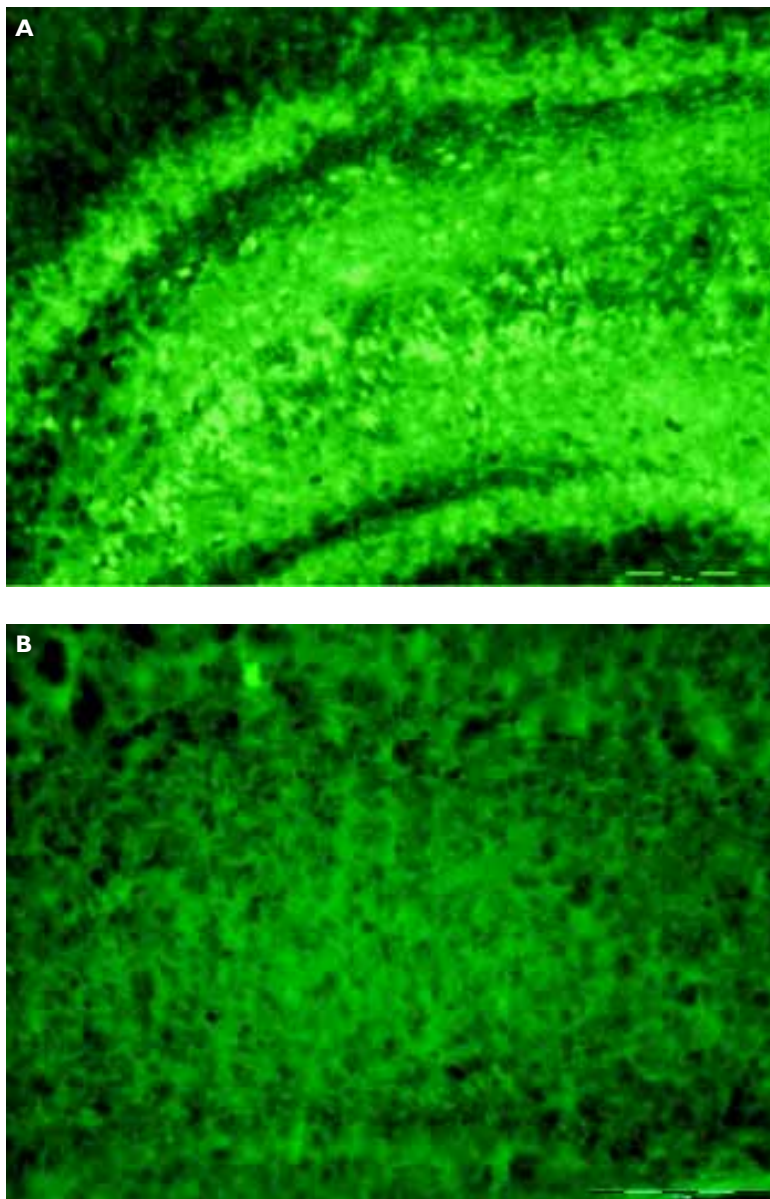


Figure 6 – A: CA1 area of the hippocampus with degenerating cells. Fluoro-Jade B staining. Homocysteic acid treated rats, perfusion one day later. B: CA1 area of the hippocampus with no degenerating cells. Fluoro-Jade B staining. Rats pre-treated with (R, S)-4-phosphonophenylglycine 15-20 minutes prior to homocysteic acid administration, perfusion one day later. Direct magnification 100x. The microphotographs were made using the microscope OLYMPUS AX70 Provis with digital camera OLYMPUS DP70.

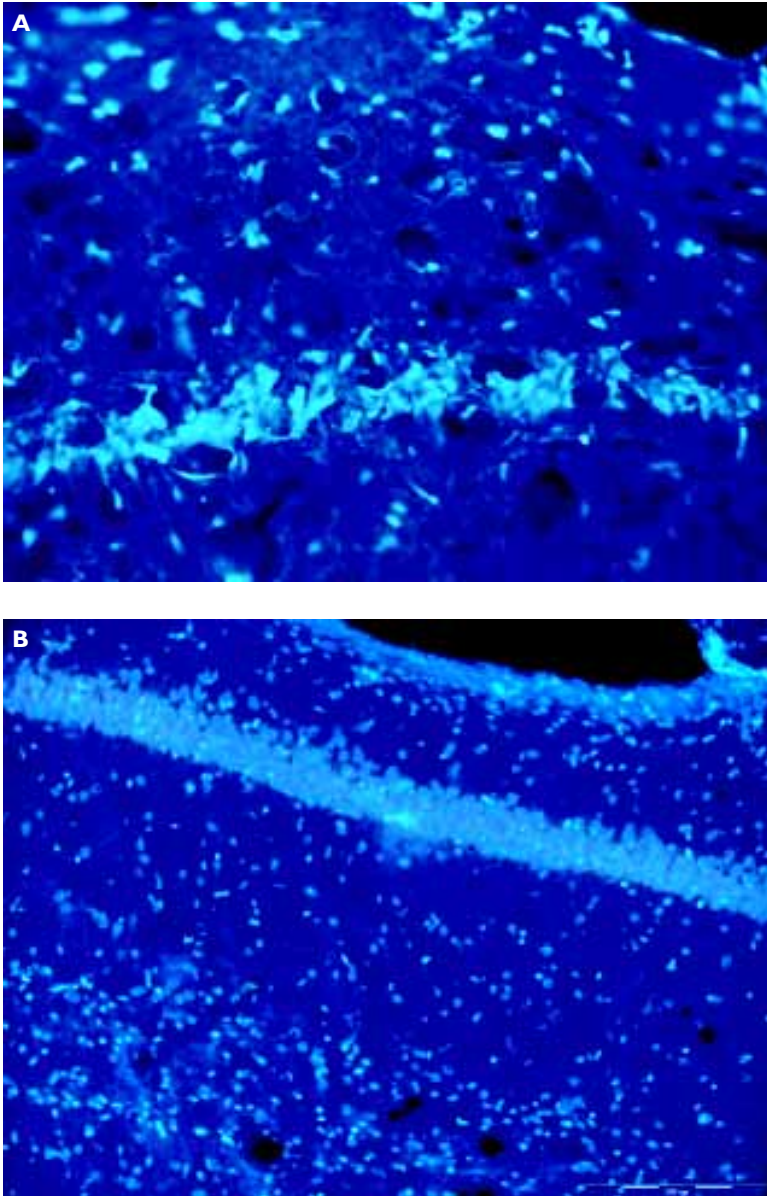
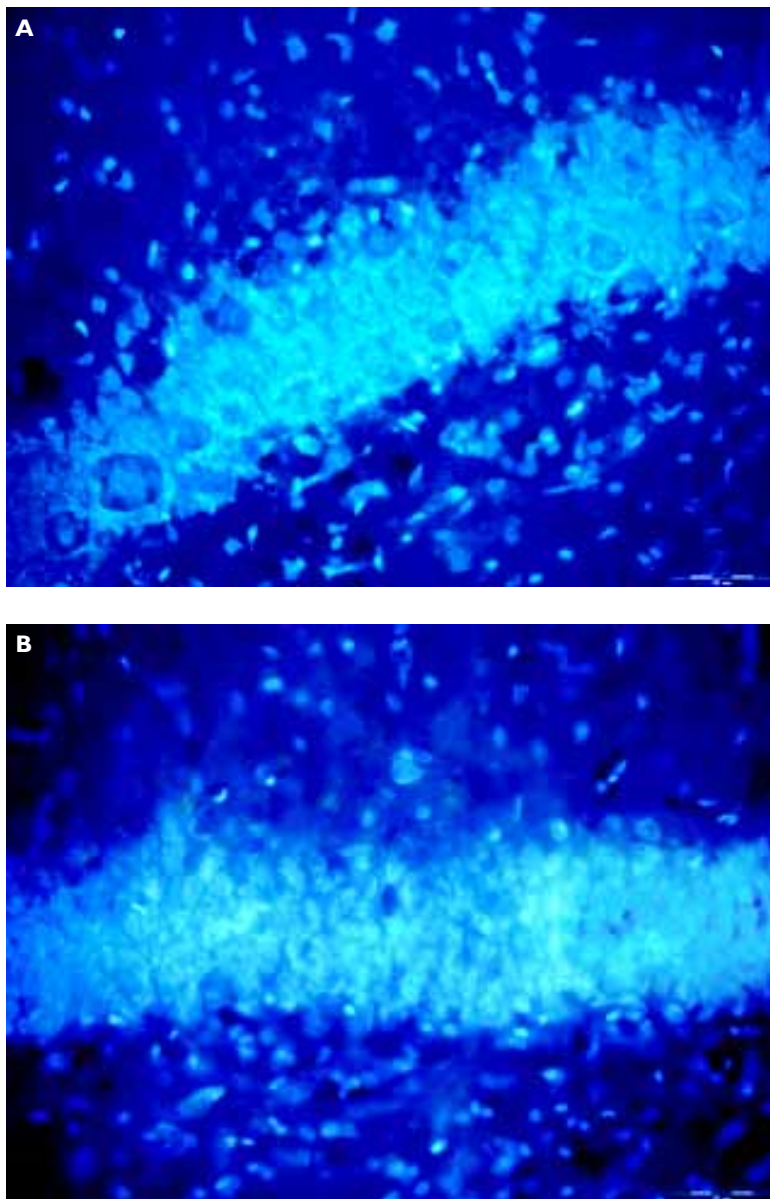
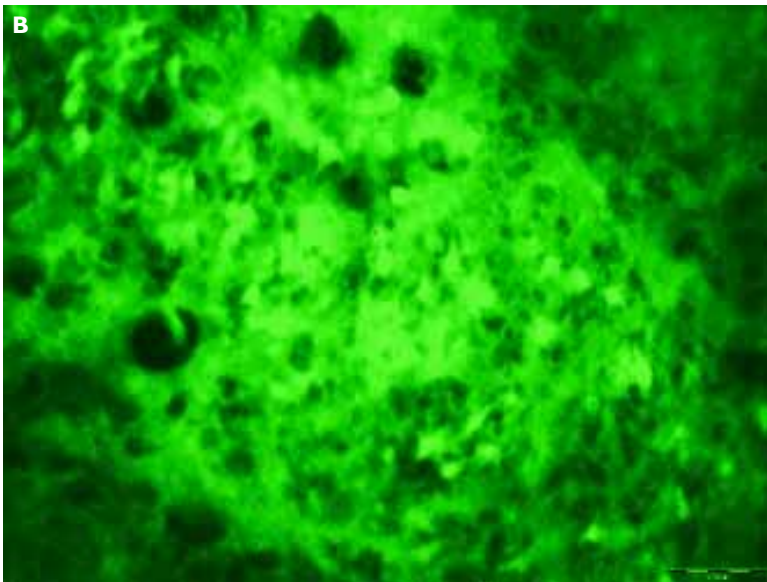
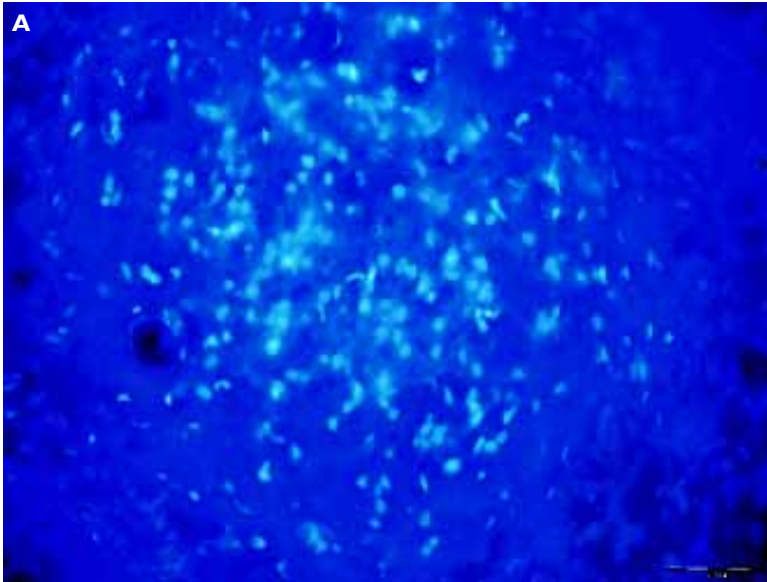


Figure 7 – A: CA1 area of the hippocampus with degenerating cells. Bis-benzimide, Hoechst 33342 staining. Homocysteic acid treated rats, perfusion one day later. B: CA1 area of the hippocampus with no degenerating cells. Bis-benzimide, Hoechst 33342 staining. Rats pre-treated with (R, S)-4-phosphonophenylglycine 15–20 minutes prior to homocysteic acid administration, perfusion one day later. Direct magnification 100x. The microphotographs were made using the microscope OLYMPUS AX70 Provis with digital camera OLYMPUS DP70.





*Figure 8 – A: Dorsal blade of the dentate gyrus with degenerating cells. Bis-benzimide, Hoechst 33342 staining. Homocysteic acid treated rats, perfusion one day later. B: Dorsal blade of the dentate gyrus with no degenerating cells. Bis-benzimide, Hoechst 33342 staining. Rats pre-treated with (R, S)-4-phosphonophenylglycine 15-20 minutes prior to homocysteic acid administration, perfusion one day later. Direct magnification 200x. The microphotographs were made using the microscope OLYMPUS AX70 Provis with digital camera OLYMPUS DP70.*



*Figure 9 – A: Hilus of the dentate gyrus with gliosis. Bis-benzimide, Hoechst 33342 staining. Homocysteic acid treated rats, perfusion six days later. B: Hilus of the dentate gyrus with degenerating cells. Fluoro-Jade B staining Homocysteic acid treated rats, perfusion six days later. Direct magnification 200x. The microphotographs were made using the microscope OLYMPUS AX70 Provis with digital camera OLYMPUS DP70.*