Multipactoring in the Beam Phase Monitor of the MMf Linac, <u>V.A. PUNTUS</u>, G.V. ROMANOV, INR RAS - In Moscow Meson Factory linear accelerator a toroidal RF cavity was installed after first drift-tube accelerating cavity for beam phase monitoring. But a signal from the cavity was very weak and deteriorated and could not be used for determination of a phase of a beam. Further investigations have shown that a reason of the situation is a multipactoring in the monitor cavity. The multipactor discharge arised in the RF fields induced by the proton beam and that was its peculiarity. This paper summarises the calculations, experimental data and the solution for this problem.