To examine the distributive anisotropy of microcracks in Inada granite, microscopic observation was conducted by using three kinds of thin sections oriented parallel to the rift plane, the grain plane and the hardway plane. As a result of the measurement made with the microcrack density of thin sections made up from the intact specimens, it is explained that the density of the microcracks intersecting with the scanning line in the R direction (perpendicular to the rift plane) showed the maximum. Furthermore it is also explained that the densities of the microcracks intersecting in the G and H directions (perpendicular to the grain and hardway planes respectively) were almost equal each other, and were approximately 7% smaller than the one in the R direction.