(*C. mucunoides*), 81.8 (*L. leucocephala*), 30.9 % (*L. leucocephala*), 66.0 % (*A. mangium*) and 78.1 % (*L. leucocephala*), respectively.

Similar trend with grass, the proportion of Zn, Fe, Mn, Cu and Se in legume tended to increase during dry season, ranged from 7.0 (*C. pubescens*) to 45.0 (*C. mucunoides*) for Zn, 25.0 (*C. mucunoides*) to 75.3 % (*L. leucocephala*) for Fe, 6.7 (*C. pubescens*) to 36.1 % (*L leucocephala*) for Mn, 9.0 (*C. pubescens*) to 67.2 % (*A. mangium*) and from 11.0 % (*C. mucunoides*) to 35.2 % (*A. mangium*), respectively. The great variation of micro mineral proportion in NDF could be reflecting the mineral affinity to the cell wall that affected their bioavailability and cause deficiency symptoms to the grazing animals. The proportion of Zn and Fe in NDF of this study almost similar with the data obtained by Kincaid and Cronrath (1983) and Ibrahim et al. (1990) who reported 31 %, 77 % and 45 % of total Zn and Fe were located in NDF fraction of lucerne hay. The mean Zn and Fe proportion in NDF of grass was 41.0 and 27.1 %, while in legume the proportion of Zn and Fe was 51.6 and 58.8 %, respectively. In contrast, Serra et al. (1996) reported that the mean proportion of Zn and Fe in NDF of forages were 2.9 % and 81.3 %, respectively. Between micro mineral elements, Mn was lowest proportion in NDF reflecting the low affinity to the cell wall (Serra *et al.*,1996). The relatively higher proportion of micro mineral in NDF during dry season could be due to fluctuation of rainfall and affinity differences of these elements in to the cell wall, that could affect the solubility and hence deficiency symptom to the grazing animals (Ibrahim *et al.*, 1990, Kincaid and Cronrath, 1983, and Serra *et al.*, 1996).

Mineral proportion of grass and legume in Acid Detergent Fiber (ADF)

The micro mineral proportion of forages in ADF was significantly ($P<0.05$) different in both seasons and species (Table 3). The proportion of micro mineral in ADF of grass during rainy season ranged from 1.0 % (*P. maximum*) to 4.0 % (*P. purpuphoides*) for Zn, 28.0 % (*A. compressus*) to 41.4 % (*P. maximum*) for Fe, 1.1 % (*P. maximum*) to 17.0 % (*A. compressus*) for Mn, 1.0 % (*P. purpuphoides*) to 3.1 % (*A. compressus*) for Cu and 15.3 % (*A. compressus*) to 55.9 % (*P.maximum*) for Se, respectively. While, in dry season the micro mineral proportion associated with ADF was higher than in rainy season, varied from 1.5 % (*P. maximum*) to 5.5 % (*A. compressus*) for Zn, 29.7 % (*P. purpuphoides*) to 56.3 % (*P. maximum*) for Fe, 2.6 % (*P. maximum*) to 19.8 % (*A. compressus*) for Mn, 1.7 % (*P. purpuphoides*) to 3.1 % (*P. maximum*) for Cu and 25.9 % (*P. purpuphoides*) 57.4 % (*P. maximum*) for Se, respectively. In legumes, the proportion of micro mineral in ADF during rainy season varied from 1.7 % (*C. pubescens*) to 4.2 % (*C. mucunoides*) for Zn, 16.9 % (*C. mucunoides*) to 55.9 % (*L. leucocephala*) for Fe, 4.1 % (*C. pubescens*) to 29.3 % (*C. mucunoides*) for Mn, 1.4 % (*C. pubescens*) to 3.0 % (*C. mucunoides*) for Cu and 8.4 % (*C. mucunoides*) to 34.8 % (*L. leucocepahala*) for Se, respectively. While in dry season, the lowest proportion of Zn, Fe, Mn, Cu and Se elements were 1.2 % (*C. pubescens*), 35.9 % (*L. leucocephala*), 5.2 % (*L. leucocephala*), 1.2 % (*A. mangium*) and 10.7 % (*C. mucunoides*) and the highest of Zn, Fe, Mn, Cu and Se elements were found in *L. leucocephala* (7.4 %), *C. pubescens* (48.2 %), *C. mucunoides* (30.8 %), *L. leucocephala* (5.1 %) and *L. leucocephala* (59.9 %), respectively