In basaltic volcanics at Tekirdağ region (Thrake), peridotitic xenoliths such as harzburgite and dunite thought as parts of upper mantle has been found. Petrographically, the basaltic lavas are olivine-basalts showing a primary paragenesis including mainly plagioclase, olivine, augite, magnetite and scarcely hypersthene as well the secondary minerals at important degrees locally. On the other hand, geochemically they correspond to the alkaline basalt, trachybasalt basanitic rock types. Peridotite xenolith-enclosing Hacıköy and Balabanlı and excluding Muratlı basalts also differ in both major and trace element contents. Including olivine (forsterite), enstatite, Cr-spinel and scarcely diopside, the peridotite xenoliths are typically protogranular and partly grading into porphyroclastic in fabric. Magmatic textures are well preserved. Displaying no foliation or lineation, those have coarse-to huge grain sizes. Bandings resembling twinning and deformation lamellas imply the mechanical effect and are characteristic for the olivines and pyroxenes. Whether, the presence of relations depicting partially melting of original mantle, between major elements of the peridotite xenoliths is a fact, the melting point is probably not high. They were unaffected by metasomatism and submit a somewhat consumed composition compared to primitive mantle.

**Key words:** Alkaline basalt, xenolith, peridotite, Thrace-Turkey