scopical research has, however, shown that well-striated triclinic felspars, as well as quartz, occur in it. Its composition is: silica, 59.3; alumina, 16.85; protoxide of iron, 7.01; lime, 4.43; magnesia, 2.61; potash, 6.57; soda, 2.44; water, etc., 1.29; total, 101.03. Average specific gravity, 2.75 to 2.90.

Syenite is of much less frequent occurrence than granite. While always thoroughly granitic in structure, it varies in texture from coarse granular, where the individual minerals can readily be distinguished by the naked eye, to compact. Among its accessory minerals of common occurrence may be mentioned titanite (sphene), quartz, apatite, epidote, orthite, magnetite, pyrite, zircon. The predominance of one or more of the ingredients has given rise to the separation of a few varieties under distinctive names. In the typical syenite, the dark silicate is almost wholly hornblende; sometimes there are to be found traces of augite within the hornblende, indicating that the former mineral was the original constituent and has been changed by paramorphism. Where the ferro-magnesian silicate is mainly augite, as in the well-known rock of Monzoni, the rock is termed Augite-syenite or Monzonite; where brown mica predominates it gives rise to Mica-syneite or Minette.

Elaeolite-syenite (Nepheline-syenite) is a granitoid rock, characterized by the association of the variety of nepheline known as elaeolite with orthoclase, and with minor proportions of plagioclase, microcline, hornblende, augite, biotite, sodalite, zircon, and sphene. It is distinguished by the rare minerals, upward of fifty in number, which it contains, and in which some of the rarer elements are combined, such as thorium, yttrium, cerium, lanthanum, tantalum, niobium, zirconium, etc. It is typically developed in Southern Norway (Brevig, Laurvig). Where zircon enters as an abundant constituent the rock is known as Zircon-syenite. Foyaite is the name given to a hornblendic variety found at Mount Foya, Portugal; Miascite is a variety with abundant mica, found at Miask; Ditroite, containing sodalite, spinel, etc., occurs at Ditró in Transylvania.

Orthoclase-Porphyry (Micro-syenite, Quartzless-porphyry, Orthophyre) stands to the syenites in the same relation that quartz-porphyry or micro-granite does to the granites. It is composed of a compact micro-granitic ground-mass, with little or no free quartz, but through which are usually scat-