

**Field aspects of Granites and related rocks in and around Makthal-Hindupur tract, Mahbubnagar district, telangana state: a preliminary study**

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**Abstract:** Field relations of granitic suite of rocks corresponding to acidic magmatism from Makthal and Hindupur areas of Mahububnagar district, Telangana, a part of Eastern Dharwar Craton of stable Peninsular Indian shield are described. The area exposes different types of granitic rocks of Dharwar Supergroup which were grouped under Peninsular Gneissic Complex (PGC). On a regional scale, sedimentary rocks of Cuddapah, Kurnool and Bhīma groups and volcanic rocks of Deccan traps occur as surrounding lithological entities. The younger supracrustal rocks are represented mainly by Gadwal schist belt, running in NW-SE direction between Narayanpet and Manyapadu where a variety of basic, intermediate and acid volcanic rocks associated with agglomerates and thin bands of Banded Iron Formation are exposed. The PGC, which covers most of the area, comprises granites, gneisses and migmatites with undistinguished patches of older metamorphic rocks. The rocks of PGC and Dharwar super group are intruded by younger granitoids of Tonalite-Trondhjemite-Granodiorite composition invariably intruded by dolerite dykes. An area of around 250 km<sup>2</sup> covering Makthal and Hindupur areas (77°15'E-77°30'E and 16°30'N-16°22'N) has been taken up for detailed investigations. Many varieties like granite, pink granite, gray granite, gneissic and banded magmatic (pink) alternate felsic and mafic rocks, biotite rich granite, and other rock types including dolerite dykes, quartz veins and pegmatite veins are noticed during systematic field traverses and the resultant findings are presented herein.

**Keywords:** *granite, pegmatite, dolerite dyke, quartz vein, Dharwar craton, Makthal.*

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