

AN ATLAS OF FIELD AND MICROSCOPIC FEATURES OF BASIC AND FELSIC VOLCANIC EJECTA IN MUMBAI VOLCANIC COMPLEX, ALONG WEST COAST, DISTRICT THANE, MAHARASHTRA, INDIA

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Abstract

It is generally believed that Deccan volcanism is a monotonous tholeiitic fissure eruption with not many variations, but such a belief is unfounded along the western coast of India especially along the coast north of Mumbai. In the present paper some fascinating field and microscopic evidences are reported to emphasize that the Deccan volcanism was accompanied by violent fissure/vent type eruptions and has though limited but significant pyroclastic deposits, besides being a stupendous fissure eruption. A detailed photographic atlas of field and microscopic features observed in the tephra from Bombay Volcanic Complex (BVC) are presented here.

Keywords: Microscopic features, Deccan volcanism, Igneous Provinces, Deccan Trap Stratigraphy, Layered volcanic Trap.