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# FURTHER DEVELOPMENT ON CONTROVERSIAL VIEW OF TERRESTRIAL AND EXTRATERRESTRIAL ORIGINS OF LIFE

**Abstract**

Prior to the beginning of life on Earth, some bioorganic compounds must have been produced biologically, in either the primitive Earth environment or the extraterrestrial environment is still a subject of great debate. The first terrestrial hypothesis of origins of life has been supported by well known Miller-Uray electric discharge experiment yields HCN, amino acids and carboxylic acids. The notion that comets, meteorites and asteroids delivered reduced organics to the surface of the primitive Earth not favoured because, the organic compounds present on them would have been pyrolyzed when these bodies hits the Earth atmosphere. According to second extraterrestrial origins of life hypothesis, the organic matter including amino acids and nucleic acid bases was delivered to Earth from extraterrestrial sources. The amino acids in carbonaceous chondrites shows an excess of sinisterial structures (L-form) as is the case in terrestrial life on Earth could have been induced by extraterrestrial organic matters. According to third hypothesis which is midway between first and second the primitive Earth atmosphere is thought to be mildly reduced containing CO, CO2, N2, H2O. If the primitive atmosphere was mildly reduced the formation of amino acids and other bioorganic compounds essential for origin of life were difficult. The present experiment indicates that amino acids or their precursors are easily produced even in slightly reduced gases by irradiating with high energy charged particles. The present work deals with the interaction of 2, 4-dintroaniline (2, 4-DNA) and 2, 4, 6-trinitroaniline (2, 4, 6-TNA) with halloysite, illite and montmorillonite clay minerals at neutral pH (7.0  0.01) and room temperature (30  1°C). The desired pH was maintained by appropriate buffer. The progress of interaction was followed spectrophotometrically by measuring the absorbance of substituted amines at their corresponding max. From these studies, it is clear that clays play a major role in the stabilization of organic molecules through their surface activity during course of chemical evolution on primate Earth. Present work support terrestrial hypothesis of origins of life. Detail will be presented.