

## GYRASE INHIBITOR DRUG RESISTANT MUTANT IN AN OBLIGATE THERMOPHILIC ACTINOMYCETE

---

*The bactericidal action of nalidixic acid on the wild type strain 1227 of an obligate thermophile Thermoactinomyces vulgaris<sup>Tsilinsky</sup> has been studied. A new, hitherto unreported, nalidixic acid resistant strain (nal<sup>r</sup>) isolated, has exhibited auxotrophy for asparagines and lysine, with an increased resistance to UV rays as well as hyperosmotic shock, with maximum bactericidal concentration (MBC) 200µg ml<sup>-1</sup>. Mutation in gyr A subunit probably cause double auxotrophy, alteration in membrane structure, as well as induction of SOS repair system in this thermophilic nal<sup>r</sup> strain.*

---