GROWTH CONDITIONS FOR CECT STRAINS

Growth conditions for bacterial strains in the open catalogue of the CECT are clearly described in each catalogue sheet. Recommended growth conditions include:

- **culture medium**: indicated by its number in the Culture Media catalogue of the CECT
- **growth temperature** (in ºC)
- **incubation time**: given in hours (h) or days (d); lag phase can be longer than the time indicated here and incubation time may need to be duplicated (particularly when activating freeze-dried cultures)
- **atmospheric requirements**: conditions recommended for revival and incubation of the culture
  - **Aerobic**: *Inoculate on agar medium on petri dishes and incubate in standard microbiological incubators. Incubate tubes of 16 by 160 mm filled with 5 ml broth statically unless otherwise indicated. If greater volumes are necessary 100 ml flasks are filled with 20 ml broth and incubated in a shaker incubator (rpm indicated in the strain catalogue sheet).*
  - **Anaerobic generating system**: *Inoculate oxygen-free tubes and plates in an aerobic environment and subsequently place them inside a re-sealable pouch or a chamber with an anaerobic generating sachet system. The anaerobic generator produces an anaerobic atmosphere with ≥10% CO_2 within 2.5 hours.*
  - **Candle jar**: *Inoculate oxygen-free tubes and plates in an aerobic environment and subsequently place them (plates inverted) inside a jar with a lighted candle. Seal the jar. The burning candle reduces the oxygen concentration to a point where the flame extinguishes.*
  - **CO_2 generating system**: *Inoculate tubes and plates in an aerobic environment and subsequently introduce them in a re-sealable pouch or a chamber with a CO_2 generating sachet system. This system produces an atmosphere with ≥ 3% CO_2.*
  - **CO_2 incubator**: *Inoculate tubes and plates in an aerobic environment and subsequently place them inside a CO_2 incubator with an atmosphere at 5% CO_2.*
  - **Deep culture**: *Inoculate tubes in an aerobic environment and subsequently place them inside a standard microbiological incubator. Use tubes with a small surface-to-volume ratio (longer than wide). Growth will start at the bottom of the tubes.*
  - **Microaerophilic generating system**: *Inoculate tubes and plates in an aerobic environment and subsequently place them inside a re-sealable pouch or a chamber with*

a microaerophilic generating sachet system. This system produces an atmosphere with 5-15% oxygen.

For further details about how to handle and cultivate anaerobes please consult the following document: **Handling and cultivation of anaerobes**