

New name for the Torula food yeast (Candida utilis)

Candida utilis was the subject of a previous Bulletin article [1]. It is a yeast of industrial interest for the production of single cell protein. It is suitable for work in schools. The control measures for working with microorganisms listed in Appendix 2 of Safety in Microbiology [2] are suitable and sufficient to control any risk associated with Candida utilis.

C. utilis has now been renamed as Lindnera jadinii. Fungi (including yeasts) are classified primarily by their structures associated with sexual reproduction. However many fungi only reproduce asexually and some fungi produce both sexual and asexual states. C. utilis shows phenotypic similarities to L. jadinii and has now been shown to share a high percentage of its

DNA with *L. jadinii*. As *C. utilis* has not been observed to reproduce sexually it is now considered to be the asexual or anamorphic state of *L. jadinii*.

Cultures of *L. jadinii* (code NCYC 707) can be obtained from the National Collection of Yeast Cultures (NCYC) [3]. NCYC provide cultures free of charge to schools.

Reference

- [1] *Candida utilis* the Torula food yeast, SSERC Bulletin, **247**, 2014, http://www.sserc.org.uk/images/Bulletins/247/ SSERC%20bulletin%20247_web_12_12.pdf.
- [2] Safety in Microbiology (2012), SSERC, www.sserc.org.uk.
- [3] National Collection of Yeast Cultures (NCYC) http://www.ncyc.co.uk/.

Health & Safety round-up

Check your tubing

Remember to keep an eye on your Bunsen tubing. There is no problem using the 'traditional' orange rubber tubing but you do need to check it regularly as it has a tendency to perish and crack. We have had a recent report of some tubing becoming 'sticky' as well.

If you use neoprene tubing, make sure you don't have tubing that is too stiff. This can be unsafe, causing Bunsen burners to fall over. If you have the tubes with thickened ends where they attach to the gas tap and the Bunsen, these will still need careful checking as they can break at the junction of this thicker section.

Thermit

The thermit reaction is an excellent, spectacular reaction that can, as long as you carry it out carefully, be an exciting addition to your demonstration repertoire.

We heard recently though of an incident involving this. The procedure was carried out as recommended on our website but the mixture did not ignite. The teacher decided to leave it and try again another day. 15 minutes later at the end of the lesson the pupils were filing out and the teacher saw they were passing quite close to it so decided to move the safety screens to be absolutely

sure they wouldn't be at any risk. She took hold of the top of the screen and at that moment the mixture ignited, throwing out sparks and as a result the teacher got some nasty burns to her hand.

We have not come across another instance of this sort of a delay with the thermit reaction but to be on the safe side, if your reaction mixture doesn't ignite and you are going to leave it for another day, squirt some water onto the top from a wash bottle to make sure it won't go off.

YouTube and others

There are lots of great-looking experiments on YouTube and other websites and you might well be tempted to give them a go. There are various problems with this. Even if the experiment is being carried out by a competent chemist - and that is often not the case - not only might there not be any health and safety advice given, even if there is it may well not be applicable in Scotland.

New experiments are a great idea. But if you see a new one, please get in touch with us before you try it so we can check it out for you.