Germinative Capacity Images with Descriptors



Image 1: Weak staining, endosperm damage by scutellum – **pass, but damaged (classified as Y)**



Image 2: Embryo missing- **not possible to assess**



Image 3: Incomplete sectioning of embryo, shoot stained – pass, but damaged (classified as Y)



Image 4: Embryo missing – not possible to assess



Image 5: Root and shoot initials strongly stained, weaker staining to result of embryo (possible that embryo has been 'scraped' to produce result) – **pass (classified as X)**



Image 6: Weak staining, no staining of root initial – fail on basis of weak staining (in reference to other corns)



Image 7: Very weakly stained – fail on basis of weak staining (in reference to other corns)



Image 8: Poor cutting, but staining of exposed tissue - ('scraping' may clarify assessment) – pass



Image 9: Poor cutting, but staining of exposed tissue - ('scraping' may clarify assessment) - **pass**



Image 10: Even staining, but not strong – pass (in reference to other grains)



Image 11: Very weak staining – **fail (in reference to other grains)**



Image 12: Not clean cut, weak staining, some aleurone staining - ('scraping' may clarify assessment) - **pass**



Image 13: Large proportion of the embryo unstained - ('scraping' may clarify assessment) - pass, but damaged (classified as Y)

Current Analytica-EBC method (3.5.1) categorises as follows:-

GC % = X + Y, incl. Y % damaged and Z % pregerminated

X = those completely coloured which are healthy coloured germs

Y = those which, although damaged, are sufficiently intact to germinate satisfactorily on malting. Usually this means that, as a minimum, the shoot and scutellum together with a little of the tissue between the shoot and root are stained

Z = Those which are living germs as for (X), but pregerminated (Z). Pregermination is more easily seen with the aid of magnification

Unstained germs or those less stained than the minimum as (Y) Include in this category any pregerminated grains which are also unstained or less stained then the minimum for (Y)