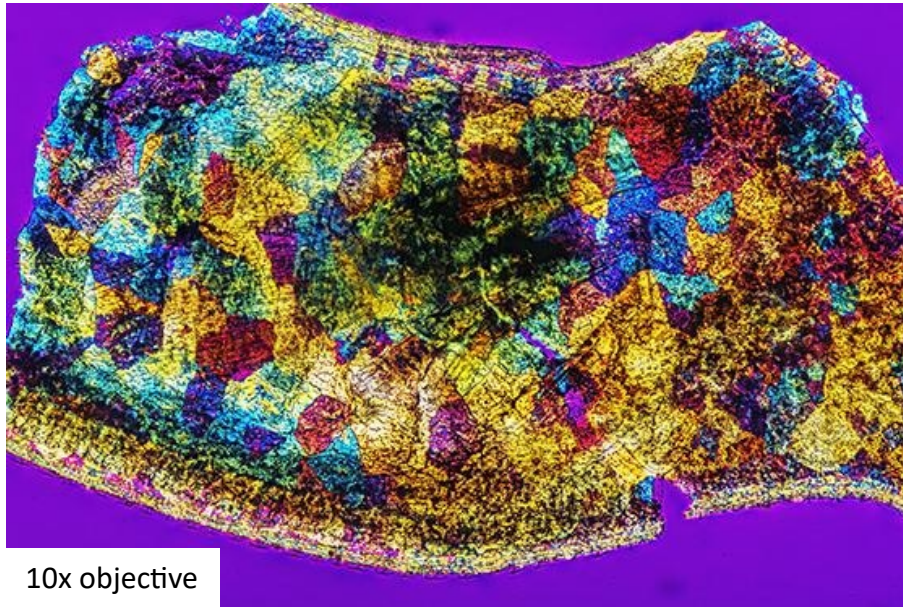
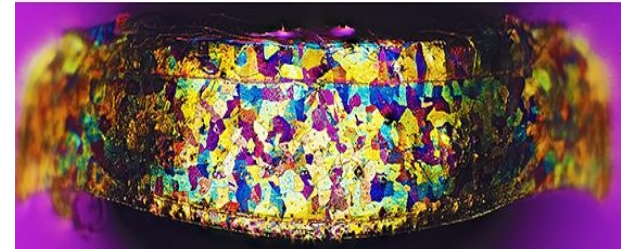
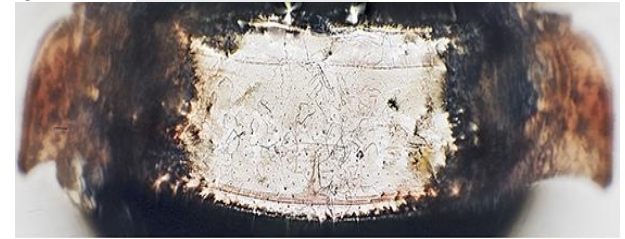


Woodlouse Surprise

by Anthony Thomas, Canada

Found a couple of these in a Berlese funnel litter extraction, somewhat unusual in that that they are terrestrial Crustacea; but they do need wet habitats so actually living in a film of water. In an attempt to make a cross section through the body I ended up with a horizontal section across the body. Looking at this section with a trinocular Olympus BH2 equipped with a set of polarizers showed a plethora of interference colours. These specimens were about 7 mm long, with a flat ventral surface with many legs and a convex dorsal surface consisting of a head, 7 large segments followed by 6 smaller segments. I removed one of the segments, dehydrated it in alcohol and mounted it in a few drops of cedarwood oil. The result was a reasonably translucent strongly rounded specimen which did not make a good candidate for photography through the BH2. My first set of images was with basic brightfield, Nikon 4x PlanApo (works OK on an Olympus BH2), 1.25x intermediate lens, 2.5x projection eyepiece (no polarizer). It produced a very bland image (top image). The Olympus 1.25x intermediate tube has a built-in analyser. When coupled with the Olympus substage polarizer one gets a darkfield polarized image (middle). Inserting a 530nm wave plate into the intermediate tube and rotating the polarizer one gets a range of interference colours (bottom). I flattened the original section and mounted it in Euparal; flattening caused this dorsal plate to crack. Under 10x objective no extra detail was seen. I just wish I could explain what the different shapes represent.



10x objective

Comments to the author Anthony Thomas are welcomed, email – at5535587 AT gmail DOT com

Published in the February 2022 edition of *Micscape* magazine.

www.micscape.org