ILMENITE

Chemical formula: $FeTiO_3$

Crystal system: trigonal

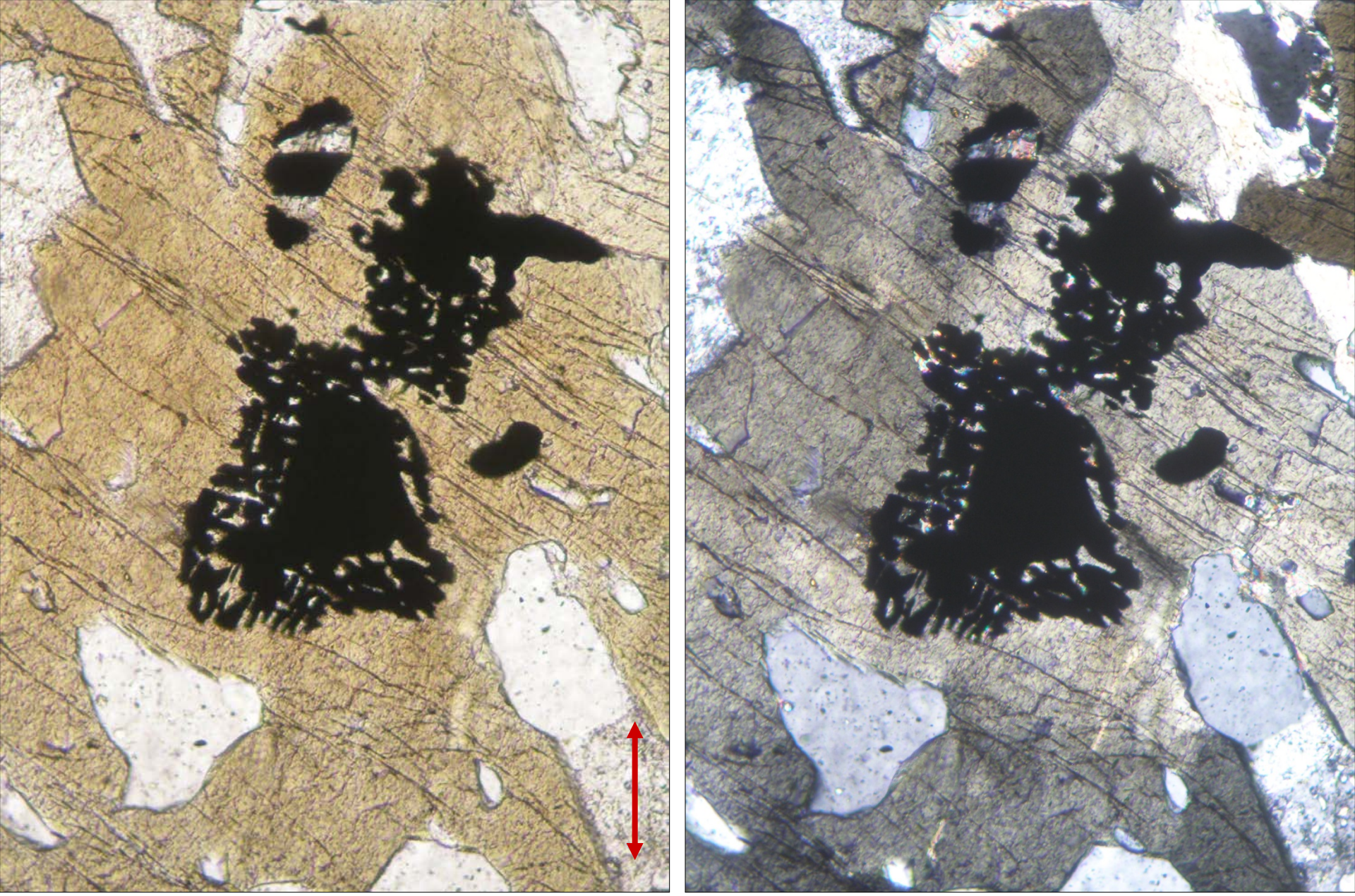
Color in thin section: opaque

Form: tabular crystals, allotriomorphic grains, granular masses, skeletal crystals

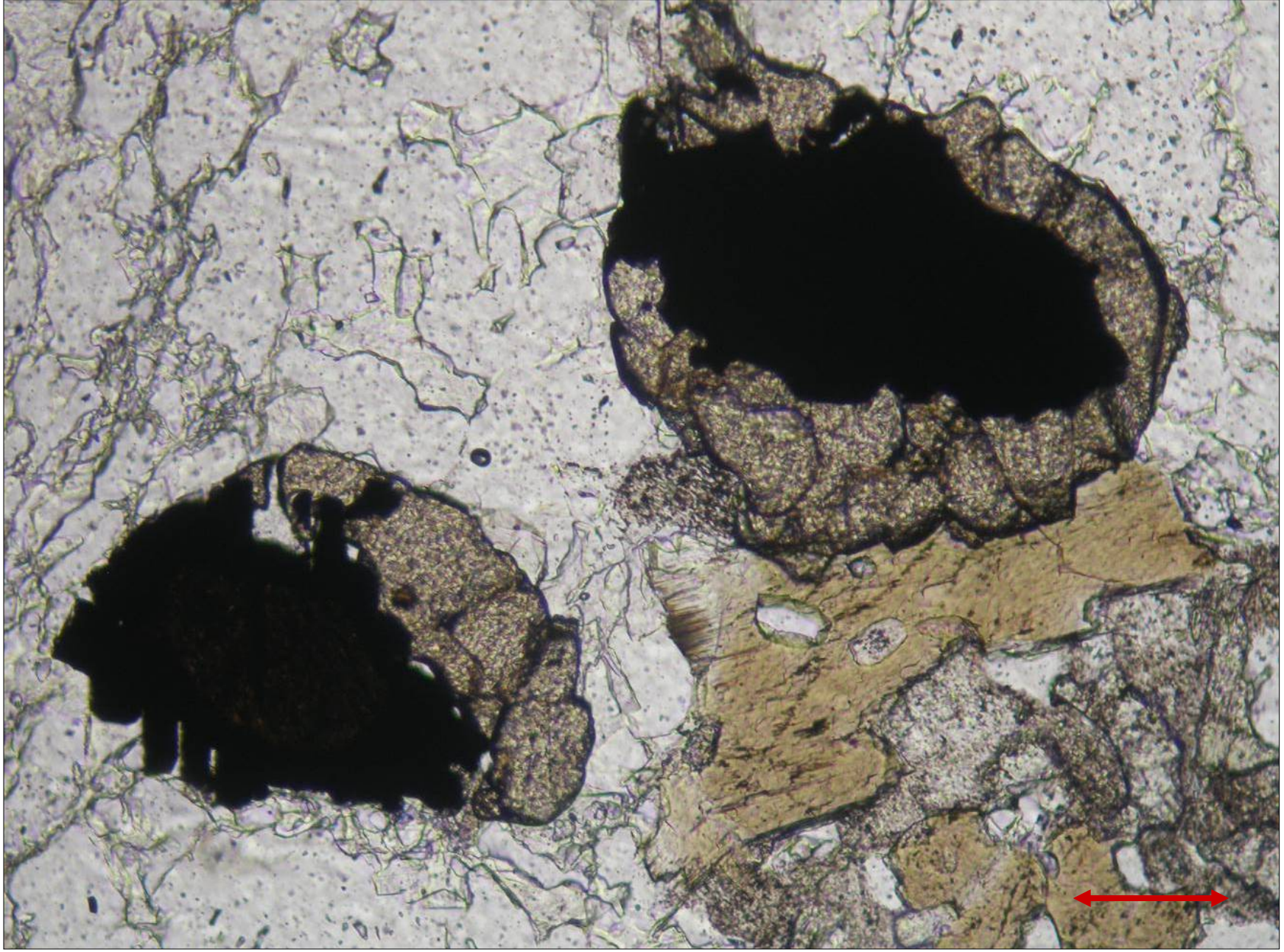
Alteration: may be altered to leucoxene (an fine-grained aggregate of titanium oxides)

Occurrence: igneous rocks (gabbro, basalt, granite, diorite), metamorphic rocks (chlorite schist, greenschists, mica schist, gneiss, amphibolite)

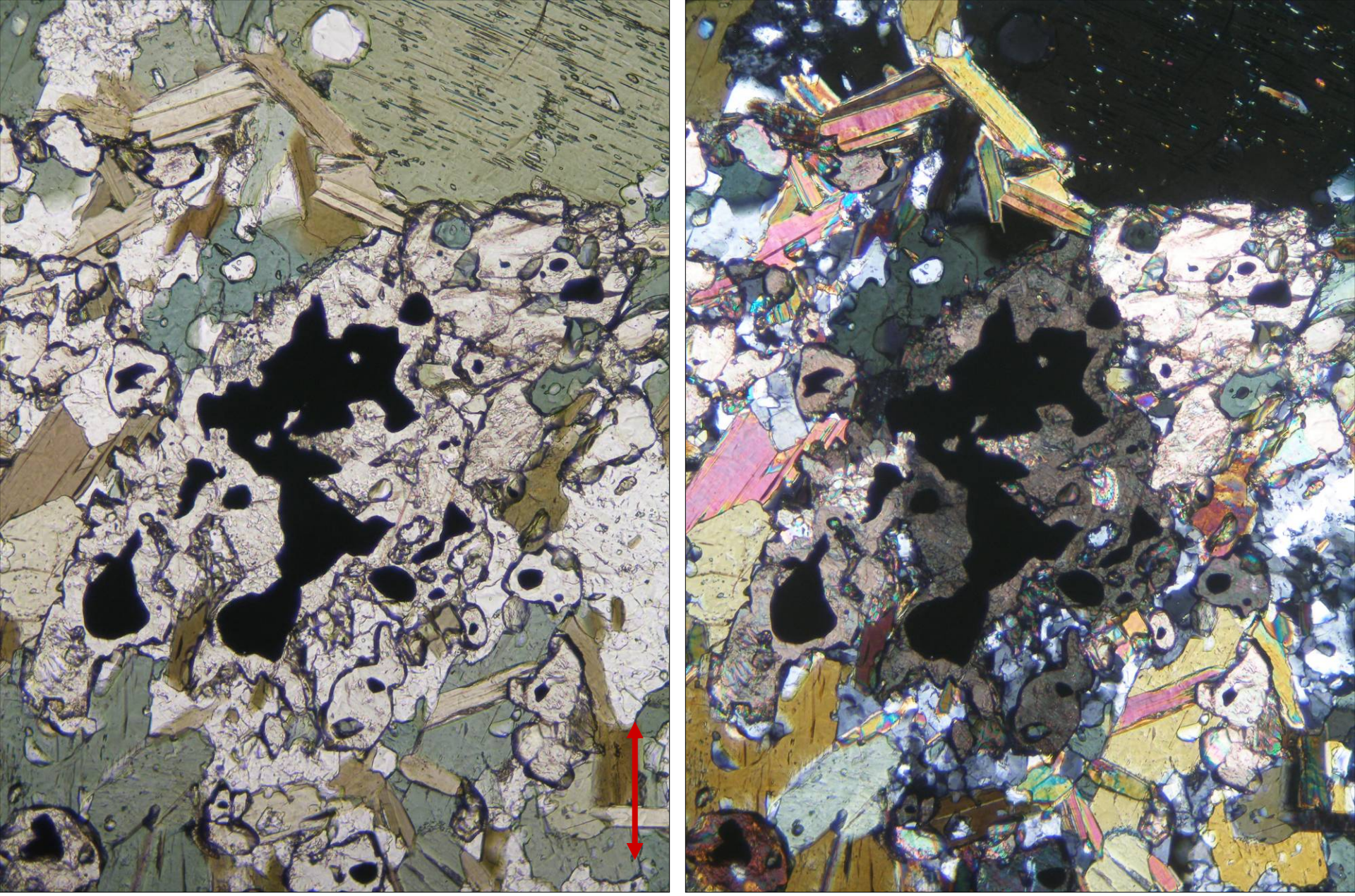
Similar minerals in thin sections: may be mistaken with magnetite, or hematite



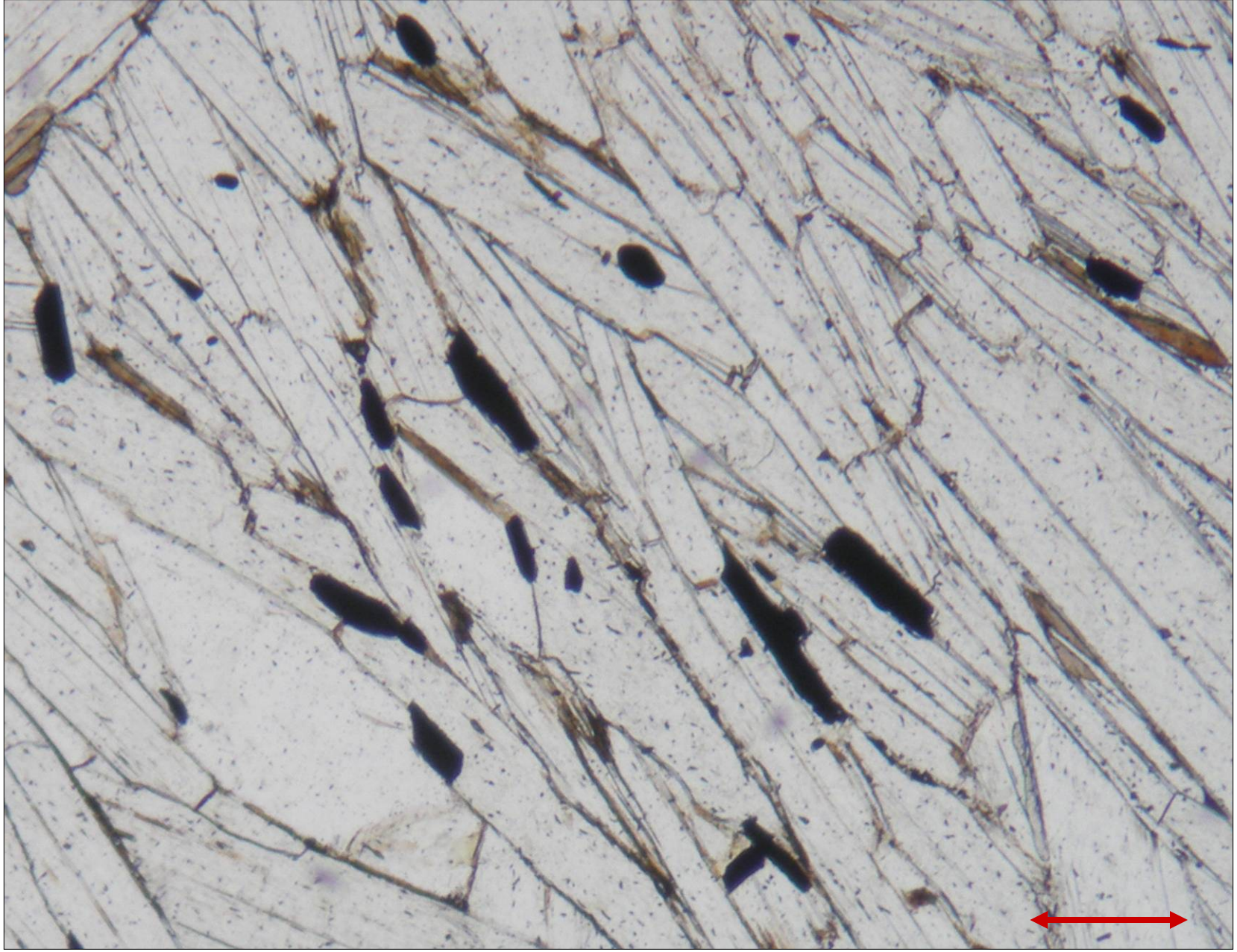
Ilmenite in garnet amphibolite from Police, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 0.7 mm. Photo: JiZi.



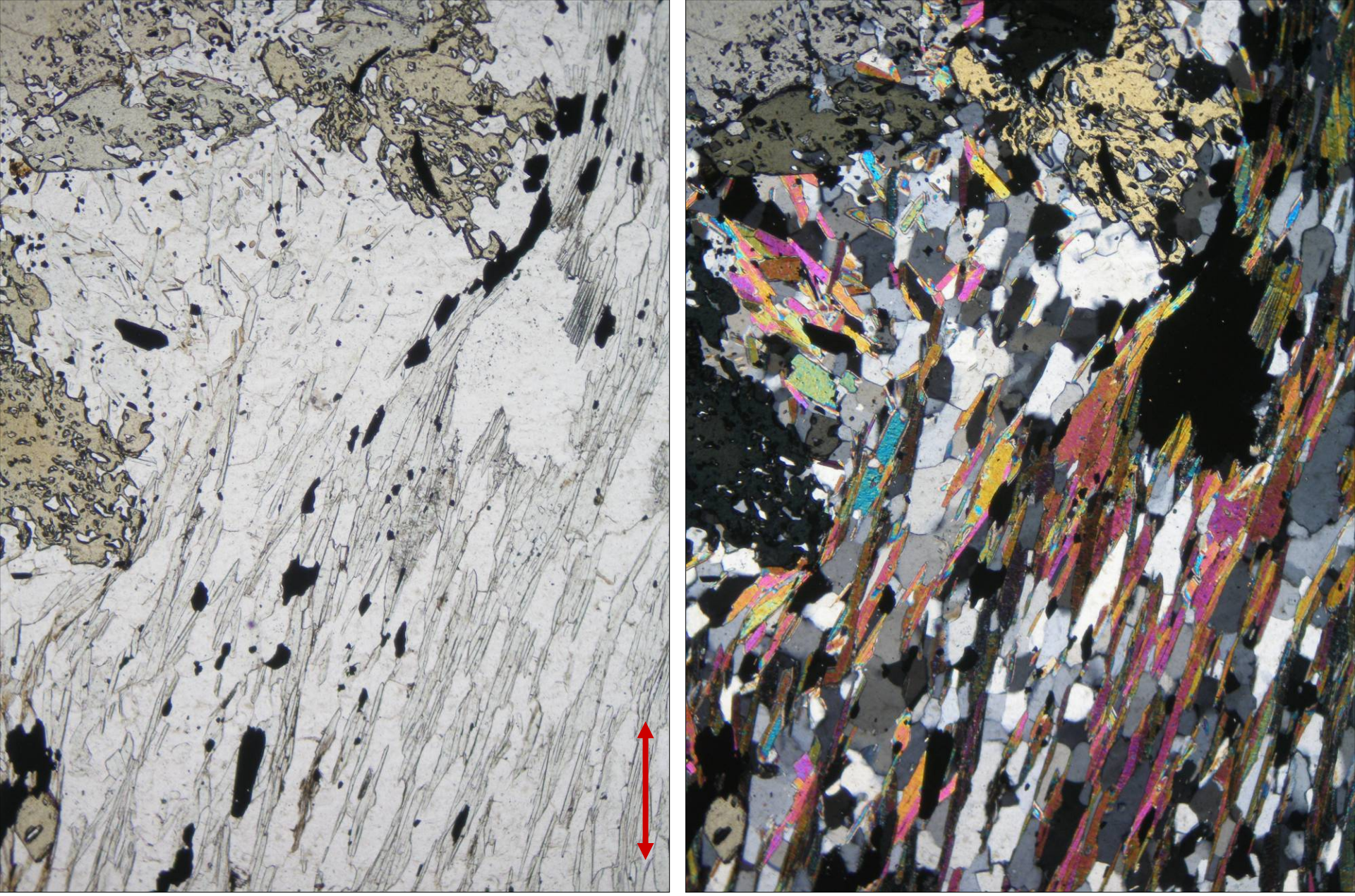
Ilmenite rimmed with titanite in garnet amphibolite from Police, the Czech Republic; PPL. Field of view is ca. 2.5 mm wide. Photo: JiZi.



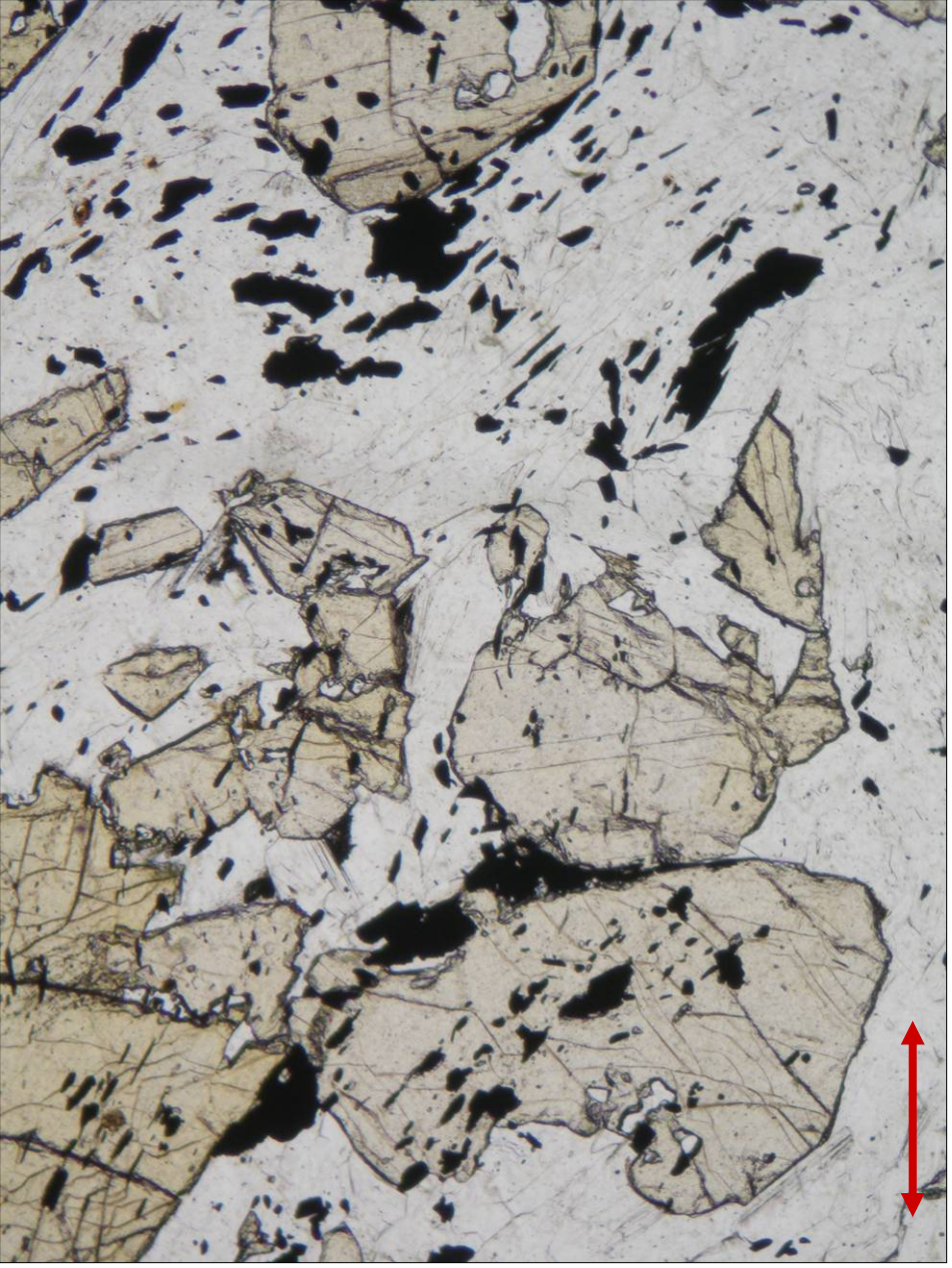
Ilmenite rimmed with titanite in amphibolite from Přemyslov, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 0.7 mm. Photo: JiZi.

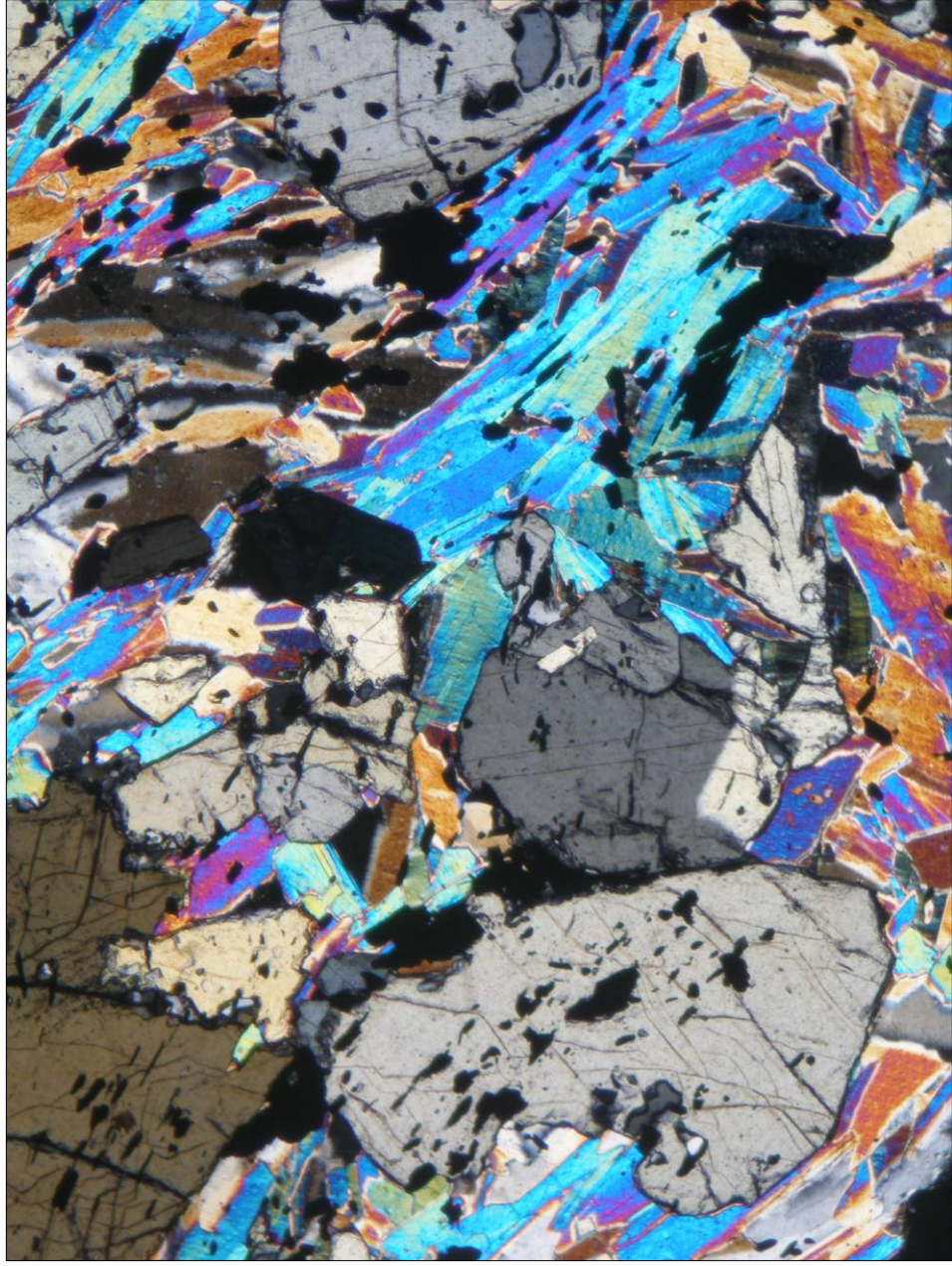


Ilmenite in mica schist from Česká Ves, the Czech Republic; PPL. Field of view is ca. 1.4 mm wide. Photo: JiZi.

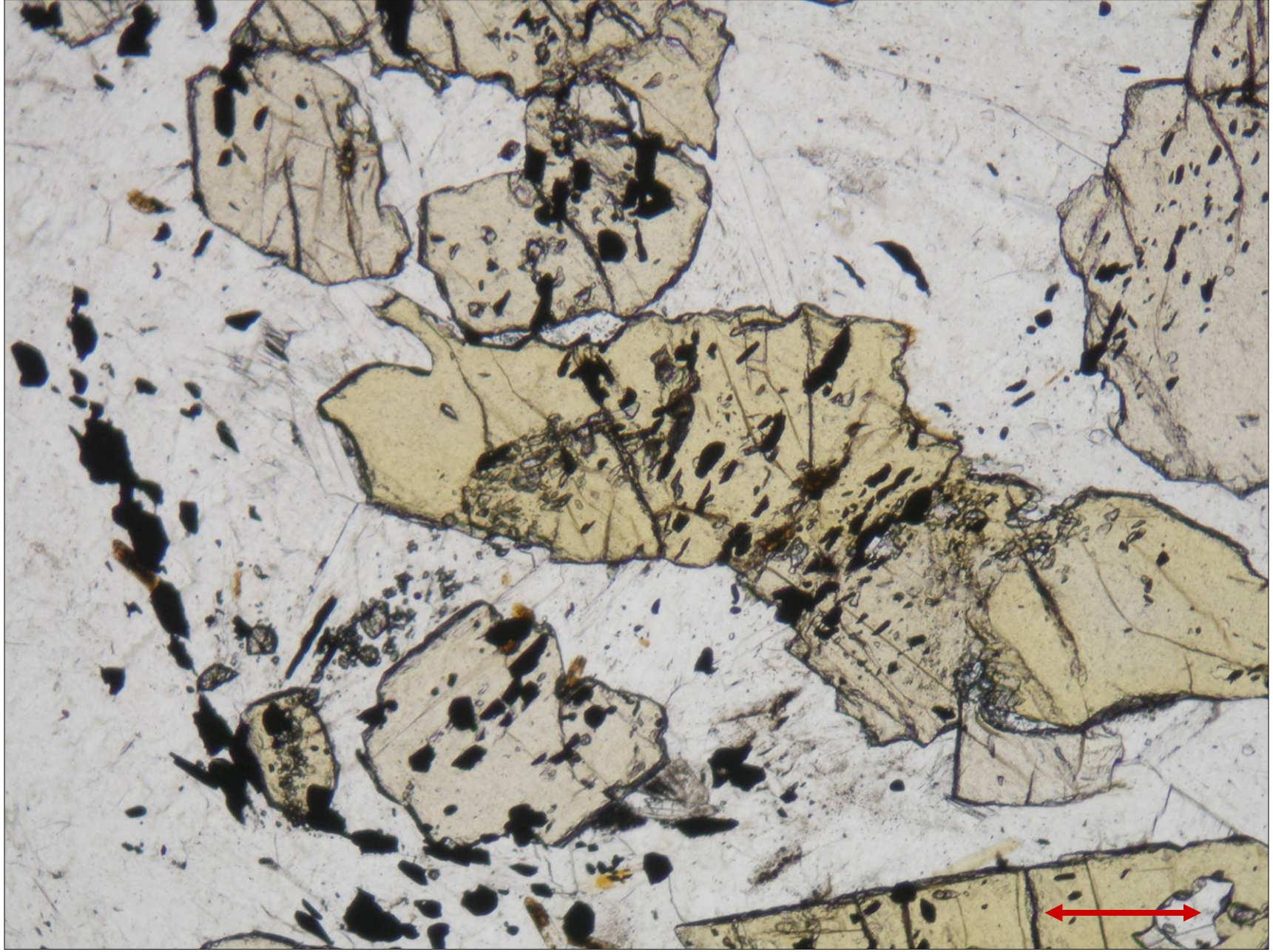


Ilmenite in mica schist from Petrov nad Desnou, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 1.8 mm. Photo: JiZi.





Ilmenite and staurolite in mica schist from Petrov nad Desnou, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 2.0 mm. Photo: JiZi.



Ilmenite and staurolite in mica schist from Petrov nad Desnou, the Czech Republic; PPL. Field of view is ca. 2.5 mm wide. Photo: JiZi.