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BIOACTIVE PROPERTIES OF *CLITOCYBE ALEXANDRI*

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Some mushrooms may have antioxidant and tumour cell growth inhibitory activities. However, there is no data on Portuguese wild mushrooms. The aim of this work was to study extracts obtained from the Portuguese wild mushroom *Clitocybe alexandri*, regarding the *in vitro* antioxidant activity and the growth inhibitory activity in human tumour cell lines.

Methanolic, ethanolic and polissacharidic extracts were tested. Antioxidant activity assays included evaluation of radical scavenging capacity, reducing power and inhibition of lipid peroxidation measured in liposome solutions. Cell growth inhibition was analysed using the SRB assay in four tumour cell lines (lung, breast, colon and gastric cancer).

The polysaccharidic extract was the most effective as antioxidant (EC_{50} < 2.5 ± 0.0 mg/ml), while the ethanolic extract was the most effective as inhibitor of cell growth (GI_{50} < 52.1 ± 2.5 µg/ml). Together, these activities indicate that this mushroom species is a promising source of bioactive compounds, including antioxidants. Furthermore, this is the first report describing growth inhibitory properties of *Clitocybe alexandri* in human tumour cell lines.