DETECTION OF *VERTICILLIUM DAHLIAE* KLEB. FROM OLIVE TREES WITH CHRONIC DECLINE AND DIEBACK OF BRANCHES AND SHOOTS

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Verticillium wilt of olive tree, associated with the soil borne fungus *Verticillium dahliae* Kleb., is considered an important disease in all countries of the Mediterranean region. This disease has been increasing in newly established olive orchards which have a negative economic impact in all regions of olive culture. In Portugal *Verticillium* wilt has not been considered an important disease and few studies were carried out about this disease. Recently, a great number of cases of chronic decline, slow growth and dieback of shoots and branches of olive trees have been reported in all regions where extensive plantations had occurred. These symptoms are characteristic of *Verticillium* wilt in olive tree, but very often are also associated with adverse environmental or agronomic conditions or inclusively with mechanical damages which hampered diagnosis of biological causes. In some of these reported situations and for diagnostic purposes we isolated *Verticillum dahliae* from plant tissues of trees with characteristic symptoms of decline and slow growth. The sample of plant tissues were tap water cleaned and surface disinfected with sodium hypochloride and incubated on PDA (Potato Dextrose Agar) in Petri dishes at 22-23 ºC in the dark. Positive isolation of the suspected pathogen has not been always obtained even though the same laboratory procedure was adopted.
Detection and identification of *Verticillium dahliae* in olive trees with slow growth and chronic decline impose new strategies for risk assessment of *Verticillium* wilt in Portugal and for developing reliable methods of detection of the pathogen in plant tissues and soils and to improve disease control measures to stop disease spatial spreading.