

Pathogenicity of fungi associated with brown spot and leaf necrosis of *Hydrangea macrophylla* (big leaf *Hydrangea*) in Uyo, South-South, Nigeria

Authors:

Andrew DE¹ and
Akpan EA²

Institution:

1. Department of Crop
Science, Faculty of
Agriculture University of
Uyo.

2. Department of Crop
Science, Faculty of
Agriculture, Akwa Ibom
State University, Obio Akpa.

Corresponding author:
Andrew DE

ABSTRACT:

Disease incidence surveys were carried out on brown spot and leaf necrosis of *Hydrangea macrophylla* between July and September; 2014. The symptoms observed in the field were brown spot which was circular or slightly irregular in shape and somewhat sunken on the flesh leaves of *H. macrophylla*. The center of the spot was about 1 inch in diameter. Symptoms observed in the field include circular brown spot found predominately at the base of the leaf of *H. macrophylla*. The spot slowly turns tan to somewhat light grey encircled by a purple halo. The spot was about one eighth to one fourth inch in diameter. The infected *H. macrophylla* samples were placed on the potato Dextrose Agar (PDA) and moist chamber. The results showed that *Colletotrichum gloeosporioides* was the most frequently isolated organism on the infected *H. macrophylla* leaves with percentage frequencies of occurrence of (90.0%), while *Cercospora hydrangea* had (10.0%) frequency of occurrence. Pathogenicity on susceptible *H. macrophylla* using all the fungal isolates, showed that *C. gloeosporioides* incited brown spot and leaf necrosis of *H. macrophylla* in this study. The other fungi isolated also may have synergized the disease development in this study.

Keywords:

Hydrangea macrophylla (big leaf *Hydrangea*), Brown spot and leaf necrosis, Pathogenicity test.