

## Alternaria Leaf Spot of Fig in the Libyan Arab Jamahiriya

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Fig (*Ficus carica* L.) is considered one of the important fruit crops in the Libyan Jamahiriya where climate and soil conditions are favorable for its growth. A few fungal diseases have been reported to cause damage to fig trees in some parts of the country (1, 2, 3, 4, 5). Kranz (2) and Pucci (5) reported the occurrence of a fruit spot disease caused by *Cladosporium herbarum* Pers. in the eastern region. Fig rust caused by *Kuchneola fici* (Cast) Butl. was observed in the Benghazi area (3). El-Zayat (1) noticed a leaf blight of fig without the presence of a causal agent.

During the spring and summer of 1980 an undescribed disease was observed on the leaves of field-grown fig trees in Gharian, Wadi El-Hai Agricultural Project, Souk El-Gumma and Ain Zara. The causal agent produces irregular necrotic spots (Fig. 1), especially on old leaves leading to their defoliation.



Fig. 1. Irregular necrotic spots induced by *Alternaria* spp. on the leaves of *Ficus carica* L. in the field.

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Infected leaves were washed thoroughly with water. The diseased areas were cut into small pieces, surface-sterilized with 10% Clorox Solution (commercial sodium hypochlorite) for two minutes, rinsed with sterile distilled water, and placed in petri-dishes containing potato dextrose agar medium. Pathogenicity studies were employed on attached leaves of two-years old fig trees and on detached leaves as well.

*Alternaria* spp. was consistently isolated from the infected leaves. Pathogenicity tests under laboratory and field conditions indicated that the isolated organism was able to induce the same type of symptoms (Fig. 2). Under humid conditions, these spots spread rapidly and caused defoliation of the infected leaves.

Review of the available literature revealed that no previous record of the alternaria leaf spot on figs in Libya. This paper reports for the first time the occurrence of this disease in the Libyan Arab Jamahiriya.



Fig. 2. Diffused necrotic spots produced by *Alternaria* spp. on detached leaves of *Ficus carica* L.

## LITERATURE CITED

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التبقع الاتزناري لأوراق التين في الجماهيرية العربية الليبية  
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المستخلص

لوحظ مرض لم يوصف من قبل على أوراق التين في كل من غريان ، مشروع وادي الحمي الزراعي بالعزيرية ، سوق الجمعة ، وعين زاره في فصلي الربيع والصيف لعام ١٩٨٠ م . تظهر أعراض المرض في صورة بقع غير منتظمة الشكل على الأوراق مما يؤدي إلى تساقطها فيما بعد .

وقد أسفرت عمليات العزل المتكررة من الأوراق المصابة عن وجود فطر *Alternaria spp.* ، كما أن التجارب العملية والحقلية لإصابة أنسجة سليمة أثبتت قدرة هذا الفطر على إحداث نفس النوع من التبقع على أوراق التين ، ولوحظ أن هذه البقع تنتشر بسرعة أكبر تحت الظروف الأكثر رطوبة مما يؤدي إلى تساقط الأوراق .