

The Turf Disease Centre

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SAMPLE ANALYSIS RESULT: DISEASE IDENTIFICATION

Date received:	21 January 2010	Sample number:	SA100106
Sent by:	Course Manager	Result to:	David Gómez Agüera, Director, Real Federación Española de Golf
Sample taken from:	Centro Nacional de Golf, Madrid	Result delivered by:	Email
Location:	10 th fairway and 18 th rough	Number of Pages:	1

THE RESULT REFERS ONLY TO THE SAMPLE(S) RECEIVED

Two hole changer core samples were received.

The sample from the 10th fairway was a repeat of that received on 09 December 2009 (SA091202) in which the organism *Labyrinthula* sp. had been identified. This sample was sent at my request to enable infected turf to be sent to Dr Mary Olsen, University of Arizona, USA, as part of her research in to the disease Rapid Blight. I analysed the plants in this new sample and the *Labyrinthula* sp. organism was still present within the plant tissues.

18th rough



In this sample, many of the received plants had been separated from their roots by the process of taking the sample. This is always a problem with longer turf. That said, the leaf tissues were heavily colonised by several fungi, bacterial and saprophytic nematode species, suggesting that the leaf tissues had developed a slow and progressive decline. The main fungi that were present on the leaf were a *Leptosphaerulina* sp., a *Fusarium* sp. and a *Curvularia* sp. All of these three fungi are very capable saprophytes and it is likely that they are dominating as secondary infections on this weakened turf.

The roots also contained three main fungi, *Gaeumannomyces graminis* var *graminis*, a *Pythium* sp. and an *Olpidium* sp. The *G. graminis* var *graminis* was not sufficiently extensive throughout the sample to suggest this as a primary cause of the yellowing to the sward. The *Pythium* sp. was also low occurrence within the root tissues. However, the *Olpidium* sp. was extensive throughout the roots that were assessed. The *Olpidium* sp. of fungi are not known to cause disease in turfgrasses but they colonise the roots under prolonged wet conditions and compete with the plant for the nutrients that are taken up by the root. When the rootzone moisture level falls, the activity of this fungus will decline and its effect on the plant will be reduced. There is no need to apply any fungicide to manage this problem however, if considered necessary, a foliar feed will allow the plants to obtain sufficient nutrient to sustain growth during this time.

I also checked the roots and the rootzone for any evidence of plant parasitic nematode or other invertebrate pests but none were apparent in this sample.

SA100106