

Disease Situation in Wild *Coffea arabica* of Ethiopia with Emphasis on the Coffee Leaf Rust, *Hemileia vastatrix*

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SUMMARY

At four habitats (Hareenna in the Bale Mountains in southeast, Bonga, Berhane-Kontir and Yayu in southwest) of Ethiopia with indigenous Afromontane rainforests including wild coffee (*Coffea arabica*) disease assessments of coffee leaf rust (*Hemileia vastatrix*), coffee berry disease (*Colletotrichum kahawae*) and coffee wilt disease (*Gibberella xylarioides*) were carried out during 2003 and 2006. Coffee leaf rust occurred in all field sites with annual variations in frequency and intensity. The disease frequency ranged between 2 and 96%. Spore samples collected on leaves could be identified comparing morphological characteristics and classified into the species *H. vastatrix* (Ritschel, 2005). The mean sizes of uredinospores measured 31.6 µm in length and 21.2 µm in width. Scanning electron microscopic photos represent typical spore formations of the wild coffee population. Race specification revealed in races II, III and X confirmed by Varzea (pers. comm.). The coffee berry disease was present in 2005 on 18.6% of the trees at Hareenna, 40% at Bonga, 6% at Berhane-Kontir and 26.3% at Yayu. The coffee wilt disease appeared on 9.7% of the trees at Hareenna, 6.4% at Bonga, 2.4% at Berhane-Kontir and 16.9% at Yayu, respectively.

Key words: *Hemileia vastatrix*, *Coffea arabica*, wild coffee, disease frequency and intensity, morphology, Ethiopia