

Publication

African 2, a clonal complex of *Mycobacterium bovis* epidemiologically important in East Africa**JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)****ID** 1022812**Author(s)** Berg, Stefan; Garcia-Pelayo, M Carmen; Müller, Borna; Hailu, Elena; Asiimwe, Benon; Kremer, Kristin; Dale, James; Boniotti, M Beatrice; Rodriguez, Sabrina; Hilty, Markus; Rigouts, Leen; Firdessa, Rebuma; Machado, Adelina; Mucavele, Custodia; Ngandolo, Bongo Nare Richard; Bruchfeld, Judith; Boschirola, Laura; Müller, Annéle; Sahraoui, Naima; Pacciarini, Maria; Cadmus, Simeon; Joloba, Moses; van Soolingen, Dick; Michel, Anita L; Djønne, Berit; Aranaz, Alicia; Zinsstag, Jakob; van Helden, Paul; Portaels, Françoise; Kazwala, Rudovick; Källénus, Gunilla; Hewinson, R Glyn; Aseffa, Abraham; Gordon, Stephen V; Smith, Noel H**Author(s) at UniBasel** [Zinsstag, Jakob](#) ;**Year** 2011**Title** African 2, a clonal complex of *Mycobacterium bovis* epidemiologically important in East Africa**Journal** Journal of bacteriology : a publication of the American Society for Microbiology**Volume** 193**Number** 3**Pages / Article-Number** 670-8

We have identified a clonal complex of *Mycobacterium bovis* isolated at high frequency from cattle in Uganda, Burundi, Tanzania, and Ethiopia. We have named this related group of *M. bovis* strains the African 2 (Af2) clonal complex of *M. bovis*. Af2 strains are defined by a specific chromosomal deletion (RDAf2) and can be identified by the absence of spacers 3 to 7 in their spoligotype patterns. Deletion analysis of *M. bovis* isolates from Algeria, Mali, Chad, Nigeria, Cameroon, South Africa, and Mozambique did not identify any strains of the Af2 clonal complex, suggesting that this clonal complex of *M. bovis* is localised in East Africa. The specific spoligotype pattern of the Af2 clonal complex was rarely identified among isolates from outside Africa and the few isolates that were found and tested were intact at the RDAf2 locus. We conclude that the Af2 clonal complex is localised to cattle in East Africa. We found that strains of the Af2 clonal complex of *M. bovis* have, in general, four or more copies of the insertion sequence IS6110 in contrast to the majority of *M. bovis* strains isolated from cattle that are thought to carry one, or few copies, only

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