Regularity theory for the anisotropic porous medium equation

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We show that a locally bounded nonnegative weak solution of the anisotropic porous medium equation

$$u_t - \sum_{i=1}^{N} (u^{m_i})_{x_i x_i} = 0$$

is locally continuous; by choosing an appropriate geometry one can deduce energy and logarithmic estimates from which one can implement an iterative method to obtain the regularity result.