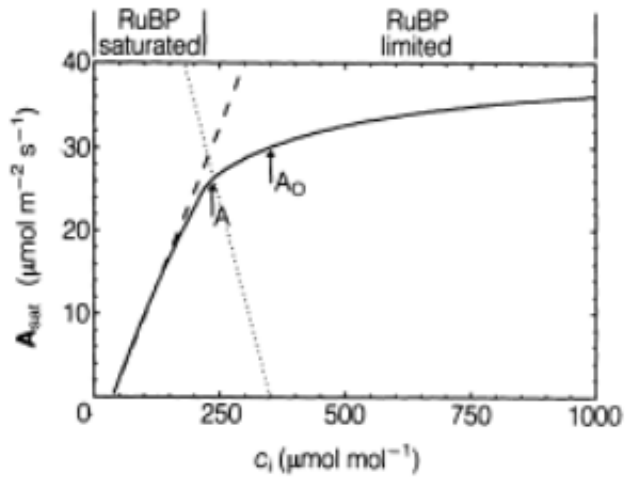

Fig. 9.10. A generalised response of the light saturated CO_2 assimilation rate ($\mathbf{A}_{sat}$) to leaf internal CO_2 mole fraction (c_i) as described by equation 9.18. $\mathbf{A}_{sat}$ on the initial slope of the curve is limited by the carboxylation efficiency (dashed line) and is therefore RuBP saturated. Beyond the inflection of the curve, $\mathbf{A}_{sat}$ is assumed to be limited by the potential rate of regeneration of RuBP and is therefore RuBP limited. Point A represents the operating point, i.e. the rate of CO_2 assimilation that would be achieved given an external CO_2 concentration (c_a) of 354 μmol mol^{-1} and the actual stomatal conductance; in this example $g_s = 0.235\,\text{mol}\,\text{m}^{-2}\text{s}^{-1}$. Point A_o illustrates the $\mathbf{A}_{sat}$ that would be achieved if there was no stomatal restriction, i.e. $g_s = \infty$ and $c_i = c_a$. The dotted line indicates the 'supply function', the c_i obtained for a given g_s with varying $\mathbf{A}_{sat}$.