**Abstract:** For a class of modules $\mathcal{C}$, we study the class $\varprojlim \mathcal{C}$ of modules that can be obtained as inverse limits of modules from $\mathcal{C}$. In particular, we investigate how additional properties of the class $\mathcal{C}$ are reflected by properties of the class $\varprojlim \mathcal{C}$. We also address the question of whether for a given module $M$, every inverse limit of products of $M$ is an inverse limit of finite products of $M$. We provide examples of modules for which the answer is positive, negative, and for which there is a reason to believe that it depends on additional set-theoretic assumptions.