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**The bounded and positive solutions of quasilinear elliptic differential equations in unbounded domains.** (Chinese. English summary) [Zbl 0875.35032](#)

J. Lanzhou Univ., Nat. Sci. 28, No. 2, 16-24 (1992).

Summary: Existence and uniqueness of the bounded and positive solutions of Dirichlet problems for quasilinear elliptic differential equations of non-divergence type in unbounded domains are proved. Here, we mainly use the method of super-functions and sub-functions and a local approach. Under certain assumptions we present sufficient and necessary conditions for the existence of super-functions and sub-functions.

**MSC:**

[35J65](#) Nonlinear boundary value problems for linear elliptic equations

[35A35](#) Theoretical approximation in context of PDEs

**Keywords:**

sub- and supersolutions; existence; uniqueness