

Title (en)  
USE OF LIPOID SILICIC ACID ESTERS FOR STRENGTHENING PLANTS AGAINST THE EFFECTS OF BIOTIC AND/OR ABIOTIC STRESS

Title (de)  
VERWENDUNG LIPOIDER KIESELSÄUREESTER ZUR PFLANZENSTÄRKUNG GEGEN EINWIRKUNG VON BIOTISCHEM UND/ODER ABIOTISCHEM STRESS

Title (fr)  
UTILISATION D'ESTERS D'ACIDE SILICIQUE LIPOIDIQUES POUR FORTIFIER LES PLANTES CONTRE L'EFFET DU STRESS BIOTIQUE ET/OU DU STRESS ABIOTIQUE

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Application  
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Abstract (en)  
[origin: DE19919219A1] The invention relates to the use of monomers and/or oligomers and also lipoid-soluble silicic acid esters, containing alcohols (lipoid silicic acid esters) which have at least a proportion of lipophilic hydrocarbon radicals, for strengthening healthy plant growth against attack by pathogens and against abiotic stress. This is achieved by introducing the lipoid silicic acid esters into the plant-root area and/or by applying said esters onto the parts of the plant which are above the ground. The invention also relates to multicomponent mixtures which are to be prepared into free-flowing, pourable emulsions of an O/W type by the addition of water or aqueous liquid phases. Said mixtures are used for protecting plants against biotic and/or abiotic stress factors and contain (1) monomers and/or oligomers of lipoid-soluble silicic acid esters, containing alcohols which have at least a proportion of lipophilic hydrocarbon radicals, mixed with (2) emulsifying agents of an O/W type which are compatible with plants. Preferably, the multicomponent mixtures contain substantially no water; they can, however, be divided into portions at a temperature ranging between 0 and 50 DEG C and in particular, ranging between 10 and 30 DEG C. The use of additional plant-compatible oil phases with the esters can also be advantageous.

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