

Title (en)

2-Substituted hydroxylaminopyrimidine, method for the production and the use thereof in the form of pesticides

Title (de)

2-Substituierte Hydroxylaminopyrimidine, Verfahren zu ihrer Herstellung und ihre Verwendung als Pestizid

Title (fr)

Hydroxylaminopyrimidines 2-substituées, procédé permettant de les produire et leur utilisation comme pesticide

Publication

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Application

EP 06806791 A 20060921

Priority

- EP 2006066572 W 20060921
- DE 102005046592 A 20050928

Abstract (en)

[origin: DE102005046592A1] 2-Substituted pyrimidine derivatives (I) are new. 2-Substituted pyrimidine derivatives of formula (I) and their salts are new. R 1>, R 11>1-8C (halo)alkyl, 2-8C (halo)alkenyl, 2-8C (halo)alkynyl, 3-6C (halo)cycloalkyl or 4-6C (halo)cycloalkenyl, or R 1>+R 11>forms a 5- to 7-membered ring optionally containing another heteroatom (O, N or S); R 1>and R 11>are optionally substituted with 1-4 of R 2>and two substituents on adjacent ring atoms can form 1-6C alkylene, 2-4C oxyalkylene or 1-3C alkylendioxy; R 2>halo, CN, 1-6C (halo)alkyl, 3-6C (halo)cycloalkyl, 4-6C cycloalkenyl, OH, 1-6C (halo)alkoxy, 2-8C alkenyloxy, 2-8C alkynyloxy, 3-6C cycloalkoxy, 4-6C cycloalkenyloxy, 1-6C alkylthio, =CH 2, =C(1-4C alkyl) 2, COA, COOA, CONAA', C(A')(NOA), NAA', NA'COA, NA'CONAA', SO mA, SO mOA, SO mNAA', Si(1-6C alkyl) 3, or phenyl optionally substituted with 1-3 of halo, 1-6C (halo)alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-6C cycloalkyl, 1-6C alkoxy, CN, NO 2, COA, COOA, CONAA', C(A')(NOA), NAA'; m : 0-2; A, A', A" : H, 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-6C cycloalkyl, 3-8C cycloalkenyl or phenyl, all optionally halogenated and/or substituted with NO 2, OCN, CN, 1-4C alkoxy, or A+A' forms a 5- or 6-membered ring with 1-4 heteroatoms (O, N, S); R 3>halo, CN, N 3, 1-4C (halo)alkyl, 2-4C (halo)alkenyl, 2-4C (halo)alkynyl, 3-6C (halo)cycloalkyl, 1-4C alkoxy, 3-4C alkenyloxy, 3-4C alkynyloxy, 1-6C alkylthio, di(1-6C alkyl)amino or 1-6C alkylamino, all optionally substituted with 1-4 of halo, CN, NO 2, 1-2C alkoxy and 1-4C alkoxy carbonyl; R 4>5- or 6-membered heterocyclyl with 1-4 heteroatoms (O, N, S), optionally halogenated and/or substituted with 1-4 of Ru; or CN, CZORa, CZNRzRb, CZNRaNRzRb, CZRa, CRaRbORz, CRaRbNRzRc, ON=CRaRb, OCZRa, NRaRb', NRaCZRb, NRaCZORb, NRaCZNRzRb, NRaN=CRcRb, NRaNRzRb or NRzORa; Ru : halo, CN, 1-8C (halo)alkyl, 2-8C (halo)alkenyl, 2-8C (halo)alkynyl, 1-6C (halo)alkoxy, 3-6C (halo)cycloalkyl, 2-8C alkenyloxy, 2-8C alkynyloxy, 4-6C cycloalkenyl, 3-6C cycloalkoxy, 4-6C cycloalkenyloxy, COA, COOA, CONAA', C(A')(NOA), NAA', NA'COA, NA'CONAA', SO mA, SO mOA, SO mNAA'; Z : O, S, NRd, NORd or NNRzRc; Rb' : 1-6C alkyl, 2-6C alkynyl, 2-6C alkynyl, 3-6C cycloalkyl or 4-6C cycloalkenyl; Ra, Rb, Rc, Rd : H or Rb'; Rz : Ra, CORd or COORD; B : 5- or 6-membered heteroaryl with 1-4 heteroatoms (O, N, S), or phenyl; L : halo, CN, OCN, 1-8C (halo)alkyl, 2-8C (halo)alkenyl, 2-8C (halo)alkynyl, 1-6C (halo)alkoxy, 3-6C (halo)cycloalkyl, 2-8C alkenyloxy, 2-8C alkynyloxy, 4-6C cycloalkenyl, 3-6C cycloalkoxy, 4-6C cycloalkenyloxy, COA, COOA, CONAA', C(A')(NOA), NAA', NA'COA, NA'CONAA', SO mA, SO mOA, SO mNAA', optionally substituted with 1-4 of RL; RL : halo, CN, 1-6C alkoxy, 3-6C cycloalkyl, 2-8C alkenyloxy, 2-8C alkynyloxy, 4-6C cycloalkenyl, 3-6C cycloalkoxy, 4-6C cycloalkenyloxy, COA, COOA, CONAA', C(A')(NOA), NAA', NA'COA, NA'CONAA', SO mA, SO mOA, SO mNAA'; and n : 1-5. Ra, Rb, Rc, Rd, Rb', Rz Are optionally halogenated and/or substituted with 1-4 of halo, CN, 1-8C alkyl, 2-10C alkenyl, 2-10C alkynyl, 1-6C alkoxy, 2-10C alkenyloxy, 2-10C alkynyloxy, 3-6C cycloalkyl, 3-6C cycloalkenyl, 3-6C cycloalkoxy, 3-6C cycloalkenyloxy; and two of Ra, Rb, Rc, Rz can form a 5- or 6-membered ring with 1-4 heteroatoms (O, N, S). Independent claims are also included for: (1) combination of at least one compound (I) and at least one other fungicide, insecticide and/or herbicide; (2) controlling phytopathogenic fungi by treating the fungi and/or materials, plants, soil or seeds to be protected from fungal attack with at least one compound (I); (3) controlling animal pests in agriculture by treating the pests and/or materials, plants, soil or seeds to be protected from them with at least one compound (I); (4) seeds comprising a compound (I) in an amount of 1-1000 g/100 kg. [Image] ACTIVITY : Plant antifungal. In a protective test against Alternaria solanion tomato plants, plants treated with 2-(1,2,4-triazol-1-yl)-4-chloro-5-(2-chloro-4-fluorophenyl)-6-(N-methoxy-N-methylamino)-pyrimidine (250 ppm) showed no more than 20% attack after 5 days, compared with 90% for control plants. MECHANISM OF ACTION : None given.

IPC 8 full level

C07D 239/42 (2006.01); **A01N 43/58** (2006.01); **A01N 43/72** (2006.01); **A01P 3/00** (2006.01); **C07D 239/48** (2006.01); **C07D 401/04** (2006.01); **C07D 403/04** (2006.01); **C07D 413/04** (2006.01); **C07D 413/14** (2006.01)

CPC (source: EP US)

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Citation (search report)

See references of WO 2007036477A1

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