

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 April 2004 (29.04.2004)

PCT

(10) International Publication Number
WO 2004/035589 A1

(51) International Patent Classification⁷: **C07D 487/08**,
493/08, 495/08, 207/34, 231/14, 213/78, 277/56, 263/34,
327/06, A01N 43/36, 43/32, 43/50

(74) Agents: **OSBORN, Martin, Keith** et al.; Syngenta Limited, Intellectual Property Department, Jealott's Hill Research Centre, P.O. Box 3538, Bracknell, Berkshire RG42 6YA (GB).

(21) International Application Number:
PCT/EP2003/011388

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 14 October 2003 (14.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0224316.0 18 October 2002 (18.10.2002) GB

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **SYNGENTA PARTICIPATIONS AG** [CH/CH]; Intellectual Property Department, Schwarzwaldallee 215, CH-4058 Basel (CH).

Published:

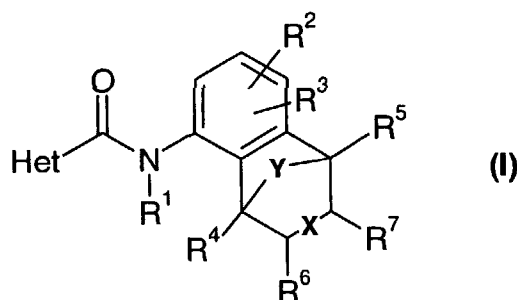
- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **EHRENFREUND, Josef** [AT/CH]; Schwarzwaldallee 215, CH-4058 Basel (CH). **TOBLER, Hans** [CH/CH]; Schwarzwaldallee 215, CH-4058 Basel (CH). **WALTER, Harald** [DE/CH]; Schwarzwaldallee 215, CH-4058 Basel (CH).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HETEROCYCLOCARBOXAMIDE DERIVATIVES



(57) Abstract: The invention relates to a fungicidally active compound of formula (I): where Het is a 5- or 6-membered heterocyclic ring containing one to three heteroatoms, each independently selected from oxygen, nitrogen and sulphur, provided that the ring is not 1,2,3-triazole, the ring being substituted by groups R⁸, R⁹ and R¹⁰; X is a single or double bond; Y is O, S, N(R¹¹) or (CR¹²R¹³)(CR¹⁴R¹⁵)_m(CR¹⁶R¹⁷)_n; m is 0 or 1; n is 0 or 1; and R¹ to R¹⁷ each, independently, have a range of values; to the preparation of these compounds, to novel intermediates used in the preparation of these compounds, to agrochemical compositions which comprise at least one of the novel compounds as active ingredient, to the preparation of the compositions mentioned and to

the use of the active ingredients or compositions in agriculture or horticulture for controlling or preventing infestation of plants by phytopathogenic microorganisms, preferably fungi.