

## **ANNEX A**

### **Pyraflufen-ethyl**

#### **A.1 List of the tests and studies evaluated**



### A.1.1 Identity

#### A.1.1.1 Identity of the active substance (Annex IIA 1; Annex IIIA 1, 3.1 to 3.4)

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP  Y/N Y	Published or not  Y/N N	Owner    NN
		Annex IIA, 1.8, 1.9, 1.10, 1.11 See Document J			

**A.1.1.2a Identity of the formulation MILAN (Annex IIIA 1, 3.1 to 3.7, 3.9 and 12.1)**

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP  Y/N Y	Published or not  Y/N N	Owner
	1997	Annex IIIA, 1.4 See Document J			NN & RPA

**A.1.2 Physical and chemical properties****A.1.2.1 Physical and chemical properties of the active substance (Annex IIA 2)**

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP  Y/N	Published or not  Y/N	Owner
Bates, M.	1996a	Annex IIA, 2.3.1/02 ET-751 E1 metabolite: Determination of the vapour pressure Nihon Nohyaku, Report No.: PC-5001	Y	N	NN
Bates, M.	1996b	Annex IIA, 2.6/02 ET-751 E-1 metabolite: Determination solubility in water buffered at specified pH values Nihon Nohyaku, Report No.: PC-5003	Y	N	NN
Bates, M.	1996c	Annex IIA, 2.6/03 E-1 soil metabolite of ET-751, E-2 soil metabolite of ET-751, E-3 soil metabolite of ET-751,; Determination of water solubility and Octanol:water partition coefficient Nihon Nohyaku, Report No.: PC-5006	Y	N	NN
Corgier, M.M.	1997a	IIA, 2.9.3/02 ET-751: Calculation of environmental photolytic half- life in water Nihon Nohyaku, Report No: E-5029	N	N	NN
Corgier, M.M.	1997b	IIA, 2.10 ET-751: Estimation of the rate of photochemical transformation in the atmosphere under tropospheric conditions Nihon Nohyaku, Report No.: E-5028	N	N	NN
Ikemoto, Y	1996	Annex IIA, 2.9.1/01 Aqueous hydrolysis study of ET-751 Nihon Nohyaku, Report No.: E-5008	Y	N	NN
Ikemoto, Y	1997	Annex IIA, 2.9.2 & 2.9.3/01 Aqueous photolysis study of ET-751 Nihon Nohyaku, Report No.: E-5025	Y	N	NN
Kubiak, R.	1996	Annex IIA, 2.3.2/02 Investigation of the volatilization of <sup>14</sup> C-ET-751 formulated corresponding to EXP31279A from plant and soil surfaces under laboratory conditions Rhône-Poulenc, Report No. RPA22	Y	N	RPA
Lewis, C. J.	1996	Annex IIA, 2.9.1/02	Y	N	NN

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP  Y/N	Published or not  Y/N	Owner
		( <sup>14</sup> C)-E-1: Hydrolytic stability Nihon Nohyaku, Report No.: E-5024			
Russell, S.	1996a	Annex IIA, 2.1.1, 2.1.2, 2.1.3, 2.2, 2.3.1/01, 2.3.2/01, 2.4.1/01, 2.4.2/01, 2.5.1, 2.6/01, 2.8/01 & 2.14/01 ET-751: Determination of physico-chemical properties of purified active substance Nihon Nohyaku, Report No.: PC-5005	Y	N	NN
Russel, S.	1996b	Annex IIA, 2.4.1/02, 2.4.2/02, 2.7, 2.11.1, 2.11.2, 2.13, 2.14/02 & 2.15 ET-751: Determination of physico-chemical properties of the substance as manufactured Nihon Nohyaku, Report No.: PC-5004	Y	N	NN
Sakamoto, Y and Kudo, M.	1996a	Annex IIA, 2.5.2/01 Measurement of mass spectra of impurities presented in ET-751 technical Nihon Nohyaku, Report No.: PC-5007	Y	N	NN
Sakamoto, Y and Kudo, M.	1996b	Annex IIA, 2.5.2/02 Measurement of IR, UV and NMR spectra of impurities presented in ET-751 technical Nihon Nohyaku, Report No.: PC-5008	Y	N	NN
Sakamoto, Y and Kudo, M.	1996c	Annex IIA, 2.5.2/03 Absorption spectra (UV/VIS, IR, NMR, MS) of HME-Cl Nihon Nohyaku, Report No.: PC-5009	Y	N	NN
Tran Thanh Phong, J.	1999	Annex IIA, 2.15/02 Determination of the oxidizing properties of technical pyraflufen-ethyl Rhône-Poulenc, Report No.: 99-267-SEC	Y	N	RPA

**A.1.2.2a Physical and chemical properties of the formulation MILAN (Annex IIIA 2)**

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N Y	Published or not Y/N N	Owner RPA
Filion, J.	1996	Annex IIIA, 2.2 & 2.3  Determination of the Flash point, the Auto-Flammability and the Explosion Properties of EXP31279A  Report n°: 96-91, 18 November 1996  Rhône-Poulenc Industrialisation, Decines Charpieu, France			
Uceda, L.G. & Yslan, F.J	1997	Annex IIIA, 2.1, 2.4, 2.5, 2.6, 2.7, 2.8  EXP31279A Determination of Physico-Chemical Characteristics and Storage Stability  Report n°: 96-90, 6 January 1997  Rhône-Poulenc Agro, Lyon, France	Y	N	RPA

**A.1.3 Data on application and further information****A.1.3.1 Data on application and further information on the active substance (Annex IIA 3)**

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP	Published or not	Owner
			Y/N	Y/N	
Grohmann A., Dizer, H.	1991	IIA, 3.9 Examination of Methods of Treatment to Remove Pesticides from Water intended for human consumption Institut für Wasser-, Boden- und Lufthygiene des Bundesgesundheitsamtes (Berlin, Germany)	N	Y	-
Murata, S., Yuda, A., Nakano, A., Kimura, Y., Motoba, K., Mabuchi, T., Miura, Y., Nishizawa, H., Funayama, S.	1995	IIA, 3.5 Mechanisms of selective action of the peroxidizing herbicide ET-751 on wheat and <i>Galium aparine</i> . Brighton Crop Protection Conference - Weeds - Proceedings Volume 1, 243-248, 1995	N	Y	NN
Perez G. Forget, J.	1998	IIIA, 4.2 MILAN (EXP 31279A) : Determination of efficiency of the cleaning procedure of spraying equipment	N	N	RPA



**A.1.4 Methods of analysis****A.1.4.1 Methods of analysis for the active substance (Annex IIA 4)**

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP	Published or not	Owner
			Y/N	Y/N	
Anding, C.	1997a	IIA, 4.2.1/02 Analytical method validation of ET-751 and its metabolite E-1 in wheat (grain, straw and shoot). Nihon Nohyaku, Report No.: A-5018	Y	N	NN
Anding, C.	1997b	IIA, 4.2.3 Analytical method validation of ET-751 and its metabolite E-1 in water. Nihon Nohyaku, Report No.: A-5027	Y	N	NN
Gladdines, M.	1995	IIA, 4.1/02 Development and validation of an analytical method for ET-751. Nihon Nohyaku, Report No.: A-500?	Y	N	NN
Ikemoto, Y.	1995	IIA, 4.2.1/01 Analytical method of ET-751 and its metabolite (E-1) in wheat grains. Nihon Nohyaku, Report No.: A-5	N	N	NN
Kudo, M.	1993	IIA, 4.1/01 Validation of the analytical method of ET-751 technical. Nihon Nohyaku, Report No.: A-5002	N	N	NN
Mörtl, S. Class, T.	1996	IIA, 4.2.4 Analytical method for determination in air Nihon Nohyaku, Report No.:	Y	N	NN
Oldfield, P. R.	1996	IIA, 4.2.5 Validation of an analytical method for the quantitative estimation of ET-751 and metabolite E1 and E9 in dog plasma Nihon Nohyaku, Report No.: A-5023	Y	N	NN
Wright, D. R. Burden, A. N.	1997	IIA, 4.2.2 ET-751 SC (Containing 20g ET-751/L): Dissipation from four field soils following spring application (Analytical method validation). Nihon Nohyaku, Report No.:	Y	N	NN

**A.1.4.2 Methods of analysis for the formulation MILAN (Annex IIIA 5)**

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP  Y/N	Published or not  Y/N N	Owner
Sciolla, C. and Uceda, L.	1996	Annex IIIA, 5.1 BIFENOX/ET-751 Determination by HPLC analysis in formulation EXP31279A (SC) Report n°: B-887-11-96 (E), 20 December 1996 Rhône-Poulenc Agro, Lyon, France	Y	N	RPA

**A.1.5 Toxicology and metabolism (Annex IIA 5; Annex IIIA 7)****A.1.5.1 Toxicology and metabolism of the active substance (Annex IIA 5)**

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
Andant, Ch., and Puy, H.	1998	IIA 5.2, IIA 5.5 Acute hepatic porphyrias and primary liver cancer. Reference: New England J. Medicine, 338 (25), 1853-1854, 1998	N	Y	-
Andersson, C., Bjersing, L. and Lithner, F.	1996	IIA 5.5 The epidemiology of hepatocellular carcinoma in patients with acute intermittent porphyria. J. Inter. Med., 240, 1996, 195-201.	N	Y	-
Amanuma, T.	1995a	IIA, 5.2.1/01 Acute oral toxicity study of ET-751 technical in rat Nihon Nohyaku, Report No.: T-5019	Y	N	NN
Amanuma, T.	1995b	IIA, 5.2.1/02 Acute oral toxicity study of ET-751 technical in mice Nihon Nohyaku, Report No.: T-5017	Y	N	NN
Amanuma, T.	1995c	IIA, 5.2.2 Acute dermal toxicity study of ET-751 technical in rat Nihon Nohyaku, Report No.: T-5018	Y	N	NN
Amanuma, T.	1996	IIA, 5.8.2/01 Effect of ET-751 on hepatic drug metabolizing enzymes in mice Nihon Nohyaku, Report No.: T-5062	N	N	NN
Bloomer, JR.	1997	IIA 5.2.1 Hepatic protoporphyrin metabolism in patients with advanced protoporphyrin liver disease. Reference : Yale J. Biol. Med, 70(4)323-330, 1997.	N	Y	-
Bouvier, G.	1999	IIA 5 ET-751 : Absence of genotoxic hazard, and no requirement of further test for EU registration. Rhône-Poulenc Agro, Sophia Antipolis, France. 31 1999	N	N	RPA
Broadmeadow, A.	1994a	IIA, 5.3.1/01 ET-751: Preliminary toxicity study by dietary administration to CD rats for four weeks Nihon Nohyaku, Report No.: T-5001	Y	N	NN
Broadmeadow, A.	1994b	IIA, 5.3.2/01 ET-751: Toxicity study by dietary administration to CD rats for 13 weeks followed by an 8 week reversibility period Nihon Nohyaku, Report No.: T-5006	Y	N	NN
Broadmeadow, A.	1994c	IIA, 5.3.2/02 ET-751: Toxicity study by dietary administration to CD rats for 13 weeks followed by an 8 week reversibility period -First supplement to Pharmacology LSR Report No : 93/NHH058/1093, Electron microscopy report-	Y	N	NN

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
		Nihon Nohyaku, Report No.: T-5007			
Broadmeadow, A.	1996a	IIA, 5.3.2/03 ET-751: Toxicity study by oral (capsule) administration to beagle dogs for 13 weeks Nihon Nohyaku, Report No.: T-5038	Y	N	NN
Broadmeadow, A.	1996b	IIA, 5.3.2/04 ET-751: Toxicity study by oral (capsule) administration to beagle dogs for 52 weeks Nihon Nohyaku, Report No.: T-5061	Y	N	NN
Burns, L. M.	1995	IIA, 5.6.2/01 ET-751: Teratology study following oral (gavage) administration in the rat Nihon Nohyaku, Report No.: T-5021	Y	N	NN
Burns, L. M.	1996	IIA, 5.6.2/02 ET-751: Teratology study in the rabbit Nihon Nohyaku, Report No.: T-5034	Y	N	NN
Butterworth, B.E., Conolly, R.B. and Morgan, K.T.	1995	IIA 5 A strategy for establishing mode of action chemical carcinogens as a guide for approaches to risk assessments. 12 April 1995. Cancer Letters, 93, 129-146	N	Y	-
Cracknell, S.	1995	IIA, 5.2.3 ET-751: acute inhalation toxicity study in the rat Nihon Nohyaku, Report No.: T-5012	Y	N	NN
Dance, C. A.	1994	IIA, 5.4.1/02 ET-751: an in vitro test for induction of chromosome damage: cytogenetic study in cultured human peripheral lymphocytes Nihon Nohyaku, Report No.: T-5008	Y	N	NN
Edwards, C. N.	1994	IIA, 5.4.2 ET-751: mouse micronucleus test Nihon Nohyaku, Report No.: T-5004	Y	N	NN
Ellefson, R.D. and Ford, R.	1996	IIA 5.9.5The polyphyrias : characteristics and laboratory tests. Reference: Regul. Toxicol.Pharmacol., 1996, 24, S119- S125.	N	Y	-
Fingar, VH., Wieman, TJ., McMahon, KS., Halling, BP., Yuhua, DA, Winkelman, JW.	1997	IIA 5.9.3Photodynamic therapy using a protoporphyrinogen oxidase inhibitor. Reference: Cancer Res., 57(20),4551-4556, 1997.	N	Y	-
Fujii, S.	1996	IIA, 5.6.1 ET-751: Two-generation reproduction study in rats Nihon Nohyaku, Report No.: T-5026	Y	N	NN
Inagaki, K.	1994	IIA, 5.4.1/04	Y	N	NN

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
		ET-751: DNA repair test (rec-assay) with <i>Bacillus subtilis</i> Nihon Nohyaku, Report No.: T-5011			
Inagaki, K.	1998	IIA 5.8 Effect of pyraflufen-ethyl dietary administration on lipid peroxidation, $\beta$ -oxidative activity, catalase activity and 8-hydroxydeoxyguanosine production in mouse liver. Research Centre, Nihon Nohyaku Co., Ltd., Japan Report N° LSRC-T98-051A (Draft in English). July 1998. 7 pp.	Y	N	NN
Kawamura, S., Yoshioka, T., Kato, T., Matsuo, M., Yasuda, M.	1996	IIA 5.2Histological changes in rat embryonic blood cells as a possible mechanism for ventricular septal defects produced by an N-phenylimide herbicide. Reference: Teratology, 54(5), 237-244, 1996.	N	Y	-
Knasmüller, S., Parzefall, W., Helma Ch., Kassie, F., Ecker, S., and Schulte- Hermann, R.	1997	IIA 5 and IIA 5.9.3Reference: Crit. Rev. Toxicol., 27(5), 495-537, 1997	N	Y	-
Komatsu, M.	1995a	IIA, 5.2.4 Primary dermal irritation study of ET-751 technical in rabbit Nihon Nohyaku, Report No.: T-5015	Y	N	NN
Komatsu, M.	1995b	IIA, 5.2.5 Primary eye irritation study of ET-751 technical in rabbit Nihon Nohyaku, Report No.: T-5014	Y	N	NN
Krijt, J., Holsteijn, I., Hassing, I., Vokurka, M., and Blaauboer, B.	1993	IIA 5.2Effect of diphenyl ether herbicides and oxadiazinon on porphyrin biosynthesis in mouse liver, rat primary hepacyte culture and HepG2 cells. Reference: Arch. Toxicol., 67, 255-261, 1993	N	Y	-
Kuwahara, M.	1996	IIA, 5.5/02 ET-751: 78-week oral oncogenicity study in mice Nihon Nohyaku, Report No.: T-5060	Y	N	NN
Kuwahara, M.	1997	IIA, 5.8.2/02 ET-751: 78-week oral oncogenicity study in mice - Additional study of effect on proliferative activity of hepatic cells Nihon Nohyaku, Report No.: T-5066	Y	N	NN
Lindal, S., Torbergesen, T., Aasly, J., Mellgren, SI., and Monstad, P.	1992	IIA 5.3.2Mitochondrial diseases and myopathies : a series of muscle biopsy specimens with ultrastructural changes in the mitochondria. Reference: Ultrastruct. Pathol., 16 (3), 263-275, 1992	N	Y	-

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
Lloyd, J. M.	1994	IIA, 5.4.1/03 ET-751: L5178Y TK+/- mouse lymphoma mutation assay using the methodology recommended by the O.E.C.D. (1984) Nihon Nohyaku, Report No.: T-5005	Y	N	NN
Logan , GM., Weimer, MK., Ellefson, M., Pierach, CA., Bloomer, JR.	1991	IIA 5.2.1Bile porphyrin analysis in the evaluation of variegate porphyria. Reference: N. Engl.J.Med, 324 (20), 1408-1411, 1991	N	Y	-
May, K.	1994	IIA, 5.4.1/01 ET-751: Assessment of mutagenic potential in amino-acid auxotrophs of <i>Salmonella typhimurium</i> and <i>Escherichia coli</i> (the Ames test) Nihon Nohyaku, Report No.: T-5003	Y	N	NN
Meyer,U.A, Schuurmans, M.M. and Lindberg, RL.	1998	IIA 5.2.1Acute porphyrias : pathogenesis of neurological manifestations. Reference: Semin. Liver Dis. 18, 1998, 43-52.	N	Y	
Meyer, UA., Schuurmans, MM., and Lindberg, RL.	1998	IIA 5.3 Acute porphyrias : pathogenesis of neurological manifestations. Reference: Semin. Liver Dis., 18(1), 43-52, 1998	N	Y	-
Moore, MR.	1993	IIA 5.2.1Biochemistry of porphyria. Reference: Int. J. Biochem., 25(10), 1353-1368, 1993.	N	Y	-
Motoba, K.	1996a	IIA, 5.1/01 Absorption, distribution, metabolism and excretion of [pyrazole-5- <sup>14</sup> C] ET-751 following a single oral administration to male and female rats Nihon Nohyaku, Report No.: T-5039	Y	N	NN
Motoba, K.	1996b	IIA, 5.1/02 Metabolism and excretion of [phenyl-U- <sup>14</sup> C] ET-751 following a single oral administration to male and female rats Nihon Nohyaku, Report No.: T-5059	Y	N	NN
Motoba, K.	1996c	IIA, 5.1/03 Absorption, distribution, metabolism and excretion of a single oral dosing of [pyrazole-5- <sup>14</sup> C] ET-751 following repetitive oral dosing of non-radiolabeled test substance to rats Nihon Nohyaku, Report No.: T-5046	Y	N	NN
Motoba, K.	1996d	IIA, 5.1/04 Metabolism and excretion of [pyrazole-5- <sup>14</sup> C] ET-751 into bile following a single oral administration to rats Nihon Nohyaku, Report No.: T-5045	Y	N	NN

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
Nakatani, M.	1998	IIA 5.8 Studies on the porphyrin accumulation in mice and rats by pyraflufen-ethyl administration. Research Centre, Nihon Nohyaku Co., Ltd., Japan (Draft in English). Report code T-5095. July 1998. 11 pp.	Y	N	NN
Nakatani, M.	1998	IIA 5.8 Investigation of liver injury caused by dietary administration of pyraflufen-ethyl in mice. Research Centre, Nihon Nohyaku Co., Ltd., Japan (Draft in English) Report n° LSRC-T98-0046. July 1998. 22 pp.	Y	N	NN
Omara, F., Blakley, B. and Wanjala, L.	1993	IIA 5.3.2Hepatotoxicity associated with dietary iron overload in mice. Reference: Human & Experimental toxicol., 12 , 463-467, 1993	N	Y	--
Patel, S.	1996	IIA, 5.5/01 ET-751: Combined oncogenicity and toxicity study by dietary administration to CD rats for 104 weeks Nihon Nohyaku, Report No.: T-5064	Y	N	NN
Rees, P. B.	1995	IIA, 5.2.6 ET-751: Delayed contact hypersensitivity study in the guinea-pig Nihon Nohyaku, Report No.: T-5013	Y	N	NN
Rio B., D.Parent- Massin, S. Lautraite and H. Hoellinger.	1997	IIA 5.2Effects of a diphenyl-ether herbicide, oxyflurfen, on human BFU-E/CFU-E development and hemoglobin synthesis Reference: Human and Exp.Toxicol. 16, 1997, 115-122.	N	Y	-
Salonpaa, P., Kottari, S., Pelkonen, O. And Raunio, H.	1997	IIA 5.2.1Regulation of CYP 2A5 induction by porphyrogenic agents in mouse primary hepatocytes. Reference: Naunyn Schiedeberts Arch. Pharmacol., 355, 8-13, 1997	N	Y	-
Tanaka, N.	1998	II A 5.4.1 Report on mutation Assay of ET-751 Using L5178Y Mouse Lymphoma Cells. Hatano Research Institute, Food and Drugs Safety Centre, Japan. HRI Report N° 10-426. Revised August 18, 1998.	Y	N	NN
Takahashi, K.	1994	IIA, 5.3.1/02 ET-751: 78-week oral oncogenicity study in mice / 28-day dose range finding study Nihon Nohyaku, Report No.: T-5002	Y	N	NN
Ye, Q., and Bodell, W.,	1996	IIA 5Production of 8-hydroxy-2'-deoxyguanosine in DNA by microsomal activation of tamoxifen and 4-hydroxytamoxifen. Reference: Carcinogenesis, 17, 1747-1750, 1996	N	Y	-

#### A.1.5.2a Toxicology and metabolism of the formulation MILAN (Annex III A 7)

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
Mercier, O.	1996a	Annex IIIA, 7.1.1 EXP31279A - Single dose toxicity study by the oral route in the rat (Limit test) Report n°: 609316, 20 December 1996 Pharmakon Europe, L'Arbresle, France	Y	N	RPA
Mercier, O.	1996b	Annex IIIA, 7.1.2 EXP31279A - Single dose toxicity study by the cutaneous route in the rat (Limit test) Report n°: 609317, 20 December 1996 Pharmakon Europe, L'Arbresle, France	Y	N	RPA
Mercier, O.	1996c	Annex IIIA, 7.1.4 EXP31279A - Primary cutaneous irritation and corrosivity test in the rabbit (P.C.I.C.) - 3 rabbits Report n°: 609318, 20 December 1996 Pharmakon Europe, L'Arbresle, France	Y	N	RPA
Mercier, O.	1996d	Annex IIIA, 7.1.5 EXP31279A - Ocular irritation and reversability test in the rabbit (O.I.R.) - 3 rabbits Report n°: 609319, 20 December 1996 Pharmakon Europe, L'Arbresle, France	Y	N	RPA
Mercier, O.	1996e	Annex IIIA, 7.1.6 EXP31279A - Sensitization potential in the guinea pig - Modified Buehler Test (9 induction applications) Report n°: 609320, 23 December 1996 Pharmakon Europe, L'Arbresle, France	Y	N	RPA



**A.1.6 Residue data****A.1.6.1 Residue data for the active substance (Annex IIA 6)**

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
Anding, C.	1997a	Annex IIA, 6.32/01 Stability study of ET-751 in Wheat (grain, straw and shoot) after storage in a freezer at about -18°C, Intermediate Results Nihon Nohyaku, Report n° A-5029, 21 April 1997	N	N	NN
Anding, C.	1997b	Annex IIA, 6.3.2/02 Stability study of E-1 in Wheat (grain, straw) and barley (shoot) after storage in a freezer at about -18°C, Intermediate Results Nihon Nohyaku, Report n° A-5030, 21 April 1997	N	N	NN
Goodyear, A.	1995	Annex IIA, 6.1 [ <sup>14</sup> C]-ET-751: Metabolism in spring wheat Nihon Nohyaku, Report No.: R-5001, April 1995	Y	N	NN
Maestracci, M.	1997a	Annex IIA, 6.3.1/01 ET-751 and E-1 (metabolite), Formulation EXP31217A (SC), Trials France 1995, Residues in soft winter wheat (grain, straw) Rhône-Poulenc Agro, Study n° 95-523, 25 April 1997	Y	N	NN
Maestracci, M.	1997b	Annex IIA, 6.3.1/02 ET-751 and E-1 (metabolite), Formulation EXP31217A (SC), Trials France 1995, Decline study, Residues in soft winter wheat Rhône-Poulenc Agro, Study n° 95-524, 25 April 1997	Y	N	NN
Maestracci, M.	1997c	Annex IIA, 6.3.1/03 ET-751 and E-1 (metabolite), Formulation EXP31217A (SC), Trials France 1995, Residue study in winter barley (grain, straw) Rhône-Poulenc Agro, Study n° 95-525, 25 April 1997	Y	N	NN
Maestracci, M.	1997d	Annex IIA, 6.3.1/04 ET-751 and E-1 (metabolite), Formulation EXP31217A (SC), Trials France 1995, Residues in winter barley, Decline study Rhône-Poulenc Agro, Study n° 95-526, 23 April 1997	Y	N	NN
Maestracci, M.	1997e	Annex IIA, 6.3.1/05 ET-751 and E-1 (metabolite), Formulation EXP31217A (SC), Trials Spain 1995, Residues in winter barley (grain, straw) Rhône-Poulenc Agro, Study n° 95-679, 25 April 1997	Y	N	NN
Maestracci, M.	1997f	Annex IIA, 6.3.1/06 ET-751 and E-1 (metabolite), Formulation EXP31217A (SC), Trials Italy 1995, Residues in soft winter wheat (grain, straw) Rhône-Poulenc Agro, Study n° 95-680, 25 April 1997	Y	N	NN

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP  Y/N	Published or not  Y/N	Owner
Maestracci, M.	1997g	Annex IIA, 6.3.1/07 BIFENOX - ET-751 and E-1 (metabolite), Formulation EXP31279A (SC), Trials France 1996, Residues in soft winter wheat (grain, straw) Rhône-Poulenc Agro, Study n° 96-503, 24 April 1997	Y	N	NN
Maestracci, M.	1997h	Annex IIA, Point 6.3.1/08. BIFENOX - ET-751 and E-1 (metabolite), Formulation EXP31279A (SC), Trials France 1996, Residues in soft winter wheat , Decline study Rhône-Poulenc Agro, Study n° 965-504, 12 May 1997	Y	N	NN
Maestracci, M.	1997i	Annex IIA, Point 6.3.1/09 BIFENOX - ET-751 and E-1 (metabolite), Formulation EXP31217A (SC), Trials France 1996, Residues in winter barley (grain and straw) Rhône-Poulenc Agro, Study n° 965-505, 15 May 1997	Y	N	NN
Maestracci, M.	1997j	Annex IIA, 6.3.1/10 ET-751 and E-1 (metabolite), Formulation EXP31217A (SC), Trials France 1996, Residues in soft winter barley, Decline study Rhône-Poulenc Agro, Study n° 96-506, 25 April 1997	Y	N	NN
Maestracci, M.	1997k	Annex IIA, Point 6.3.1/11 BIFENOX - ET-751 and E-1 (metabolite), Formulation EXP31217A (SC), Trials France 1996, Residues in soft winter wheat (grain and straw) Rhône-Poulenc Agro, Study n° 96-519, 15 May 1997	Y	N	NN
Maestracci, M.	1997l	Annex IIA, 6.3.1/12 BIFENOX - ET-751 and E-1 (metabolite), Formulation EXP31279A (SC), Trials France 1996, Residues in soft winter wheat, Decline study Rhône-Poulenc Agro, Study n° 96-520, 24 April 1997	Y	N	NN
Strätz, J.	1997	Annex IIA, 6.3.1/13 Ermittlung des Rückstandsverhaltens des herbiziden Wirkstoffes ET-751 im Herbizid RPA31279H in Getreide Rhône-Poulenc Agro, Study n° 96-675, 7 May 1997	Y	N	NN

**A.1.7 Environmental fate and behaviour****A.1.7.1 Environmental fate and behaviour of the active substance (Annex IIA 7)**

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
Bates, M.	1996	IIA, 7.1.2/01 ET-751: Determination of adsorption coefficient on soil ( $K_{oc}$ ) by HPLC simulation. Nihon Nohyaku, Report No: E-5005	Y	N	NN
Benwell, L. and Burden, A. N.	1997	IIA, 7.1.1.2.2/01 ET-751 SC (containing 20 g ET-751/l): Dissipation from four field soils following spring application. Nihon Nohyaku, Report No: R-5028	Y	N	NN
Burden, A. N. and Dunn, L	1997	IIA, 7.1.1.2.2/02 ET-751 SC (containing 20 g ET-751/l): Dissipation from four field soils following autumn application. Nihon Nohyaku, Report No: R-5031	Y	N	NN
Ikemoto, Y.	1996	IIA, 7.2.1.1/01 Aqueous hydrolysis study of ET-751. Nihon Nohyaku Co. Ltd., Report No: E-5008	Y	N	NN
Ikemoto, Y.	1996	IIA, 7.2.1.2 Aqueous photolysis study of metabolites of ET-751 using distilled water and river water . Nihon Nohyaku Co. Ltd., Report No: LSRC-E96-059A	N	N	NN
Ikemoto, Y.	1997	IIA, 7.2.1.2 Aqueous photolysis study of ET-751. Nihon Nohyaku Co. Ltd., Report No: E-5025	Y	N	NN
Kimura, Y.	1996a	IIA, 7.1.3.1 Soil column leaching of [pyrazole-5- $^{14}$ C] ET-751 (Normal study) Nihon Nohyaku, Report No: E-5009	Y	N	NN
Kimura, Y.	1996b	IIA, 7.1.3.2 Soil column leaching of [pyrazole-5- $^{14}$ C] ET-751 (Aged study) Nihon Nohyaku, Report No: E-5010	Y	N	NN
Lewis, C. J.	1996a	IIA, 7.1.1.1.2/02, 7.1.1.2.1/08 ( $^{14}$ C)-ET-751: Photodegradation on a soil surface. Nihon Nohyaku, Report No: E-5006	Y	N	NN
Lewis, C. J.	1996b	IIA, 7.2.1.3.2 ( $^{14}$ C)-ET-751: Degradation and retention in water/sediment systems. Nihon Nohyaku, Report No: E-5011	Y	N	NN
Lewis, C. J.	1997	IIA, 7.2.1.1/02 ( $^{14}$ C)-E-1: Hydrolytic stability. Nihon Nohyaku, Report No.: E-5024	Y	N	NN
Purser, D.	1995a	IIA, 7.1.1.2.1/02 ( $^{14}$ C)-ET-751: Soil degradation at 20°C.	Y	N	NN

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
		Nihon Nohyaku, Report No: E- 5001			
Purser, D.	1995b	IIA, 7.1.1.2.1/03 ( <sup>14</sup> C)-ET-751: Soil degradation at 10°C Nihon Nohyaku, Report No: E- 5003	Y	N	NN
Purser, D.	1996a	IIA, 7.1.1.1.1/01, 7.1.1.2.1/01 ( <sup>14</sup> C)-ET-751: Aerobic soil metabolism Nihon Nohyaku, Report No: E-5018	Y	N	NN
Purser, D.	1996b	IIA, 7.1.1.1.2/01, 7.1.1.2.1/05 ( <sup>14</sup> C)-ET-751: Anaerobic soil metabolism. Nihon Nohyaku, Report No: E-5004	Y	N	NN
Purser, D.	1997	IIA, 7.1.1.1.1/02 ( <sup>14</sup> C)-ET-751: Aerobic soil metabolism - Addendum Nihon Nohyaku, Report No: E-5027	Y	N	NN
Yeomans, P.	1996a	IIA, 7.1.1.2.1/04 ( <sup>14</sup> C)-E-2 (ET-751 metabolite): Soil degradation at 20°C. Nihon Nohyaku, Report No: E-5013	Y	N	NN
Yeomans, P.	1996b	IIA, 7.1.1.2.1/05 ( <sup>14</sup> C)-E-3 (ET-751 metabolite): Soil degradation at 20°C. Nihon Nohyaku, Report No: E-5014	Y	N	NN
Yeomans, P.	1996c	IIA, 7.1.1.2.1/07 ( <sup>14</sup> C)-E-2 (ET-751 metabolite): Anaerobic soil degradation at 20°C. Nihon Nohyaku, Report No: E-5012	Y	N	NN
Yeomans, P.	1996d	IIA, 7.1.2/02 ( <sup>14</sup> C)-E-1 (ET-751 metabolite): Adsorption/desorption in three soils. Nihon Nohyaku, Report No: E-5016	Y	N	NN
Yeomans, P.	1996e	IIA, 7.1.2/03 ( <sup>14</sup> C)-E-2 (ET-751 metabolite): Adsorption/desorption in three soils. Nihon Nohyaku, Report No: E-5017	Y	N	NN
Yeomans, P.	1996f	IIA, 7.1.2/04 ( <sup>14</sup> C)-E-3 (ET-751 metabolite): Adsorption/desorption in three soils Nihon Nohyaku, Report No: E-5020	Y	N	NN

**A.1.7.2 Environmental fate and behaviour of the formulation MILAN (Annex IIIA 9)**

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP  Y/N	Published or not  Y/N	Owner
Wicks, R.J.	1997	Annex IIIA, 9.2.1 ET-751 and Its Soil Metabolites E-1, E-2 and E-3: Computer Simulation of the Behaviour in Soil After Autumn and Spring Applications Using the PELMO 2.01 Model) Report n°: 2014236, April 1997 Rhône-Poulenc Agro, Essex, UK	No, but good modelling practices followed	N	RPA

## A.1.8 Ecotoxicology

## A.1.8.1 Ecotoxicology of the active substance (Annex IIA 8)

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
Candolfi, M.P.	1996a	IIA, 8.3.2/01 EXP31279A: Laboratory Toxicity Test with the Parasitic Wasp <i>Aphidius rhopalosiphi</i> (Hymenoptera: Braconidae) based on the IOBC Method of Polgar (1988) Rhône-Poulenc Agrochimie, Report no: 96-032-1013	Y	N	RPA
Candolfi, M.P.	1996b	IIA, 8.3.2/02 EXP31279A: Laboratory Contact Toxicity Test with the Predacious Mite, <i>Typhlodromus pyri</i> Scheuten (Acari: Phytoseiidae), based on the IOBC Approved Method of Overmeer (1988) Rhône-Poulenc Agrochimie, Report no: 96-037-1013	Y	N	RPA
Caunter, J.E. Magor, S.E. Croudace, C.P.	1995a	IIA, 8.2.1/01 ET-751: Acute toxicity to rainbow trout ( <i>Oncorhynchus mykiss</i> ) Nihon Nohyaku, Report No: W-5003	Y	N	NN
Caunter, J.E. Magor, S.E. Croudace, C.P.	1995b	IIA, 8.2.1/02 ET-751: Acute toxicity to bluegill sunfish ( <i>Lepomis macrochirus</i> ) Nihon Nohyaku, Report No: W-5002	Y	N	NN
Caunter, J.E. Johnson, P.A. Croudace, C.P.	1996a	IIA, 8.2.1/03 E-1: Acute toxicity to rainbow trout ( <i>Oncorhynchus mykiss</i> ) Nihon Nohyaku, Report No: W-5017	Y	N	NN
Caunter, J.E. Cornish, S.K. Croudace, C.P.	1996b	IIA, 8.2.1/04 E-1: Acute toxicity to bluegill sunfish ( <i>Lepomis macrochirus</i> ) Nihon Nohyaku, Report No: W-5018	Y	N	NN
Croudace, C.P. Caunter, J.E. Wallace, S.J.	1996a	IIA, 8.2.2.2 E-1: Chronic toxicity to fathead minnow ( <i>Pimephales promelas</i> ) embryos and larvae Nihon Nohyaku, Report No: W-5029	Y	N	NN
Croudace, C.P. Banner, A.J. Johnson, P.A.	1996b	IIA, 8.2.4/01 ET-751: Acute toxicity to <i>Daphnia magna</i> Nihon Nohyaku, Report No: W-5020	Y	N	NN
Croudace, C.P. Banner, A.J. Johnson, P.A.	1996c	IIA, 8.2.4/02 E-1: Acute toxicity to <i>Daphnia magna</i> Nihon Nohyaku, Report No: W-5016	Y	N	NN
Croudace, C.P. Williams, N.J. Shearing, J.M.	1996d	IIA, 8.2.5 E-1: Chronic toxicity to <i>Daphnia magna</i> Nihon Nohyaku, Report No: W-5026	Y	N	NN
Dengler, D.	1997	IIA, 8.5 Assessment of the side effects of ET-751 technical on the	Y	N	NN

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
		activity of the soil microflora Nihon Nohyaku, Report No: N-5011			
Grinell, A.J. Croudace, C.P. Caunter, J.E. Gillings, E.	1996	IIA, 8.2.3 E-1: Determination of the accumulation and elimination of [ <sup>14</sup> C]E-1 in rainbow trout ( <i>Oncorhynchus mykiss</i> ) Nihon Nohyaku, Report No: W-5030	Y	N	NN
Morgan, D.J. Croudace, C.P. Magor, S.E.	1996	IIA, 8.2.6/01 ET-751: Toxicity to the green alga <i>Selenastrum capricornutum</i> Nihon Nohyaku, Report No: W-5024	Y	N	NN
Nengel, S.	1996	IIA, 8.3.1.1 Assessment of side effects of ET-751 Technical to the honey bee, <i>Apis mellifera</i> L. in the laboratory following the EPPO guideline No.170 Nihon Nohyaku, Report No: N-5010	Y	N	NN
Odin-Feurtet, M.	1998	IIA 8.2.6 E2 : Freshwater algal growth inhibition study (72 h) ( <i>Selenastrum capricornutum</i> ) Rhône-Poulenc, Report No : 603459	N	N	RPA
Pascual, J.	1998	IIA 8.2 Position paper : Pyraflufen-ethyl : Risk to fish, daphnids and algae from metabolite E2	N	N	RPA
Smyth, D.V. Croudace, C.P. Johnson, P.A.	1996a	IIA, 8.2.6/03 ET-751: Toxicity to the freshwater diatom <i>Navicula pelliculosa</i> Nihon Nohyaku, Report No: W-5021	Y	N	NN
Smyth, D.V. Croudace, C.P. Wallace, S.J.	1996b	IIA, 8.2.6/04 E-1: Toxicity to the green alga <i>Selenastrum capricornutum</i> Nihon Nohyaku, Report No: W-5015	Y	N	NN
Smyth, D.V. Croudace, C.P. Johnson, P.A.	1996c	IIA, 8.2.6/06 E-1: Toxicity to the freshwater diatom <i>Navicula pelliculosa</i> Nihon Nohyaku, Report No: W-5022	Y	N	NN
Smyth, D.V. Croudace, C.P. Magor, S.E.	1996d	IIA, 8.2.8 E-1: Toxicity to duckweed ( <i>Lemna gibba</i> ) Nihon Nohyaku, Report No: W-5025	Y	N	NN
Smyth, D.V. Croudace, C.P. Wallace, S.J.	1997a	IIA, 8.2.6/02 ET-751: Toxicity to the green alga <i>Selenastrum capricornutum</i> Nihon Nohyaku, Report No: W-5031	Y	N	NN
Smyth, D.V. Croudace, C.P. Magor, S.E.	1997b	IIA, 8.2.6/05 E-1: Toxicity to the green alga <i>Selenastrum capricornutum</i> Nihon Nohyaku, Report No: W-5034	Y	N	NN

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP  Y/N	Published or not  Y/N	Owner
Standens-Peek, W.M.M. Leopold, M.A.	1997	IIA, 8.1.3 Reproduction study in mallard duck with ET-751 techn. Nihon Nohyaku, Report No.: W-5032	Y	N	NN
van Dreumel, I.F. Leopold, M.A.	1995a	IIA, 8.1.1 Acute oral toxicity study in bobwhite quail with ET-751 techn. Nihon Nohyaku, Report No.: W-5010	Y	N	NN
van Dreumel, I.F. Leopold, M.A.	1995b	IIA, 8.1.2/02 5-day dietary toxicity study in mallard duck with ET-751 techn. Nihon Nohyaku, Report No.: W-5011	Y	N	NN
van Dreumel, I.F. Reijnders, J.B.J.	1996	IIA, 8.1.2/01 5-day dietary toxicity study in bobwhite quail with ET-751 techn. Nihon Nohyaku, Report No.: W-5019	Y	N	NN
Wachter, S.	1996	IIA, 8.4.1 Acute toxicity of ET-751 Technical on earthworms, <i>Eisenia foetida</i> using an artificial soil test Nihon Nohyaku, Report No: N-5007	Y	N	NN



**A.1.8.2 Ecotoxicology of the formulation MILAN (Annex IIIA 10)**

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP  Y/N	Published or not  Y/N	Owner
Candolfi, M.P.	1996a	Annex IIIA, 10.4.1 EXP31279A: Laboratory Oral and Contact Test with the Honeybee, <i>Apis mellifera</i> , based on the EPPO Guideline 170 (1992) Report n°:96-040-1013, 17 December 1996 Springborn Laboratories (Europe), Horn, Switzerland	Y	N	RPA
Candolfi, M.P.	1996b	Annex IIIA, 10.5.1/01 EXP31279A: Laboratory Toxicity Test with the Parasitic Wasp <i>Aphidius rhopalosiphi</i> (Hymenoptera: Braconidae) based on the IOBC Method of Polgar (1988) Report n°:96-032-1013, 5 September 1996 Springborn Laboratories (Europe), Horn, Switzerland	Y	N	RPA
Candolfi, M.P.	1996c	Annex IIIA, 10.5.1/02 EXP31279A: Laboratory Contact Toxicity Test with the Predacious Mite, <i>Typhlodromus pyri</i> Scheuiten (Acari: Phytodeiidae), based on the IOBC Approved Method of Overmeer (1988) Report n°:96-037-1013, 9 December 1996 Springborn Laboratories (Europe), Horn, Switzerland	Y	N	RPA
Candolfi, M.P.	1996d	Annex IIIA, 10.5.1/03 EXP31279A: Laboratory Contact Toxicity Test with Spiders, <i>Pardosa</i> sp. (Araneae: Lycosidae), based on the BBA Method of Wehling and Heimbach (1994) Report n°:96-042-1013, 17 December 1996 Springborn Laboratories (Europe), Horn, Switzerland	Y	N	RPA
Candolfi, M.P.	1997a	Annex IIIA, 10.5.1/04 EXP31279A: Laboratory Acute Toxicity Test with the Ground Beetle, <i>Poecilus cupreus</i> L. (Coleoptera: Carabidae) based on the IOBC Approved Method of Heimbach (1992) Report n°:96-046-1013, 14 January 1997 Springborn Laboratories (Europe), Horn, Switzerland	Y	N	RPA
Candolfi, M.P.	1997b	Annex IIIA, 10.5.1/05 EXP31279A: Laboratory Toxicity Test with the Green Lacewing, <i>Chrysoperla carnea</i> Steph. (Neuroptera: Chrysopidae), based on the IOBC Approved Method of Bigler (1988) Report n°:96-047-1013, 29 January 1997 Springborn Laboratories (Europe), Horn, Switzerland	Y	N	RPA
Candolfi, M.P.	1997c	IIIA, 10.5.1/06 EXP31279A: Laboratory Contact Toxicity Test with the Seven-Spotted Lady Beetle, <i>Coccinella Septempunctata</i> L. (Coleoptera: Coccinellidae), based on the Method of Pinsdorf (1989) Report n°:96-050-1013, 6 February 1997	Y	N	RPA

Author(s)	Year	Annex IIA Point Title Company, Report No.	GLP GEP Y/N	Published or not Y/N	Owner
		Springborn Laboratories (Europe), Horn, Switzerland			
Forster, J.	1997	Annex IIIA, 10.7.1. A Laboratory assessment of the effects of EXP31279A on soil microflora respiration and nitrogen transformation according to BBA guidelines VI 1-1 (1990) Report n°: ELL/1251, 10 February 1997 Eurolaboratories Ltd., Bedfordshire, UK	Y	N	RPA
Odin-Feurtet, M.	1997a	Annex IIIA, 10.2.1.3/01 EXP31279A: Freshwater Algal Growth Inhibition Study (72 hours) ( <i>Scenedesmus subspicatus</i> ) Report n°:SA 96365, 6 January 1997 Rhône-Poulenc Agro, Sophia Antipolis, France	Y	N	RPA
Odin-Feurtet, M.	1997b	Annex IIIA, 10.2.1.3/03 EXP31279A: Freshwater Algal Growth Inhibition Study (72 hours) ( <i>Selenastrum capricornutum</i> ) Report n°: SA 96435, 6 January 1997 Rhône-Poulenc Agro, Sophia Antipolis, France	Y	N	RPA
Smyth, D.V. et al	1996	Annex IIIA, 10.2.1.3/02 EXP31279A: Toxicity to the Freshwater Diatom <i>Navicula pelliculosa</i> Report n°:BL5877/B5, December 1996 Brixham Environmental Laboratory, Zeneca Ltd., UK	Y	N	RPA
Suteau, P.	1996	Annex IIIA, 10.6.1.1 EXP31279A: Acute Toxicity (14-Day) to Earthworms ( <i>Eisenia foetida</i> ), Artificial Soil Method Report n°: SA96269, 14 November 1996 Rhône-Poulenc Agro, Sophia Antipolis, France	Y	N	RPA
Suteau, P.	1997a	Annex IIIA, 10.2.1.1 EXP31279A: Acute Toxicity (96 hours) to Rainbow Trout ( <i>Oncorhynchus mykiss</i> ) under Semi-Static Conditions Report n°: SA 96298, 16 January 1997 Rhône-Poulenc Agro, Sophia Antipolis, France	Y	N	RPA
Suteau, P.	1997b	Annex IIIA, 10.2.1.2 EXP31279A: Acute Toxicity (48 hours) to Daphnids ( <i>Daphnia magna</i> ) under Semi-Static Conditions Report n°: SA 96296, 15 January 1997 Rhône-Poulenc Agro, Sophia Antipolis, France	Y	N	RPA