

**APPENDIX J. ECOTOXICOLOGY BIBLIOGRAPHY FOR CALIFORNIA RED LEGGED FROG**

**Ecological Effects MRID Studies Submitted to EPA**

Guideline: 71-1 Avian Single Dose Oral Toxicity

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MRID: 00131633

Fletcher, D. (1983) Report to: Acute Oral Toxicity Study with AC 243,997 in Bobwhite Quail: BLAL No. 83 QD 20; AC No. 981-83- 116. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Bio-Life Assoc., Ltd., submitted by American Cyanamid Co., Princeton, NJ; CDL:251506-F)

MRID: 00131634

Fletcher, D. (1983) Report to: Acute Oral Toxicity Study with AC 243,997 in Mallard Ducks: BLAL No. 83 DD 16; AC No. 981-83- 115. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Bio-Life Assoc., Ltd., submitted by American Cyanamid Co., Princeton, NJ; CDL:251506-G)

MRID: 00133551

Fletcher, D. (1983) Report to: Acute Oral Toxicity Study with AC 243,997 in Mallard Ducks: AC No. 981-83-115; BLAL No. 83 DD 16. (Unpublished study received Dec 15, 1983 under 241-EX-101; prepared by Bio-Life Assoc., Ltd., submitted by American Cyanamid Co., Princeton, NJ; CDL:252004-L)

MRID: 00153773

Fletcher, D. (1984) Acute Oral Toxicity Study with Arsenal Herbicide in Bobwhite Quail: Final Report: BLAL No. 84 QD 48. Unpublished study prepared by Bio-Life Assoc., Ltd. 28 p.

MRID: 00153774

Fletcher, D. (1984) Acute Oral Toxicity Study with Arsenal Herbicide in Mallard Ducks: BLAL 84 DD 25. Unpublished study prepared by Bio-Life Assoc., Ltd. 27 p.

Guideline: 71-2 Avian Dietary Toxicity

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MRID: 00131635

Fletcher, D. (1983) Report to: 8-Day Dietary LC50 Study with AC 243,997 in Bobwhite Quail: BLAL No. 83 QC 23; AC No. 981-83-114. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Bio-Life Assoc., Ltd., submitted by American Cyanamid Co., Princeton, NJ; CDL:251506-H)

MRID: 00131636

Fletcher, D. (1983) Report to ...: 8-Day Dietary LC50 Study with AC 243,997 in Mallard Ducklings: BLAL No. 83 DC 23; AC No. 981-83- 113. (Unpublished study received Oct 6,

1983 under 241-273; prepared by Bio-Life Assoc., Ltd., submitted by American Cyanamid Co., Princeton, NJ; CDL:251506-I)

MRID: 00133552

Fletcher, D. (1983) Report to: 8-Day Dietary LC50 Study with AC 243,997 in Bobwhite Quail: BLAL No. 83 QC 23; AC No. 981-83-114. (Unpublished study received Dec 15, 1983 under 241-EX-101; prepared by Bio-Life Assoc., Ltd., submitted by American Cyanamid Co., Princeton, NJ; CDL:252004-M)

MRID: 00133553

Fletcher, D. (1983) Report to: 8-Day Dietary LC50 Study with AC 243,997 in Mallard Ducklings: BLAL No. 83 DC 23; AC No. 981-83-113. (Unpublished study received Dec 15, 1983 under 241-EX-101; prepared by Bio-Life Assoc., Ltd., submitted by American Cyanamid Co., Princeton, NJ; CDL:252004-N)

MRID: 00147115

Fletcher, D. (1984) 8-Day Dietary LC50 Study with AC 252,925 in Bobwhite Quail: BLAL No. 84 QC 48. Unpublished study prepared by Bio-Life Assoc., Ltd. 27 p.

MRID: 00153775

Fletcher, D. (1984) 8-day Dietary LC50 Study with Arsenal Herbicide in Bobwhite Quail: Final Report: BLAL No. 84 QC 49. Unpublished study prepared by Bio-Life Assoc., Ltd. 29 p.

MRID: 00153776

Fletcher, D. (1984) 8-day Dietary LC50 Study with Arsenal Herbicide in Mallard Ducklings: Final Report: BLAL No. 84 DC 48. Unpublished study prepared by Bio-Life Assoc., Ltd. 29 p.

MRID: 93048006

Gagne, J. (1990) American Cyanamid Company Phase 3 Summary of MRID 00131635. 8-Day Dietary LC50 Study with AC 243,997 in Bobwhite Quail. Prepared by Bio-Life Associates, Ltd. 17 p.

MRID: 93048007

Gagne, J. (1990) American Cyanamid Company Phase 3 Summary of MRID 00131636. 8-Day Dietary LC50 Study with AC243,997 in Mallard Ducklings. Prepared by Bio-Life Associates, Ltd. 16 p.

Guideline: 71-4 Avian Reproduction

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MRID: 43831401

Fletcher, D.; Pedersen, C.; Solatycki, A.; et al. (1995) Toxicity and Reproduction Study: AC 243,997 Technical: Bobwhite Quail (*Colinus virginianus*): Revised Final Report: Lab Project Number: 991-86-124: 86 QR 16: OREP 856.01. Unpublished study prepared by Bio-Life Associates, Inc. 379 p.

MRID: 43831402

Fletcher, D.; Pedersen, C.; Solatycki, A.; et al. (1995) Toxicity and Reproduction Study: Mallard Duck (*Anas platyrhynchos*): AC 243,997 Technical: Revised Final Report: Lab Project Number: 991-86-123: 86 DR 15: OREP 856.01. Unpublished study prepared by Bio-Life Associates, Inc. 398 p.

MRID: 45119714

Ahmed, M.; Kapustka, L.; Wisk, J. (1999) Avian Reproduction Studies on AC 243997 Technical: Lab Project Number: ECO 97-147: ECO 97-146: 954-97-147. Unpublished study prepared by American Cyanamid Company and Wildlife International Ltd. 362 p. {OPPTS 850.2300}

Guideline: 72-1 Acute Toxicity to Freshwater Fish

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MRID: 00131630

Kintner, D.; Forbis, A. (1983) Acute Toxicity of AC 243,997 to Bluegill Sunfish (*Lepomis macrochirus*): Static Bioassay Report #30096. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Analytical Bio-Chemistry Laboratories, Inc., submitted by American Cyanamid Co., Princeton, NJ; CDL:251506-C)

MRID: 00131631

Forbis, A.; Kintner, D. (1983) Acute Toxicity of AC 243,997 to Channel Catfish (*Ictalurus punctatus*): Static Bioassay Report 30097. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Analytical Bio-Chemistry Laboratories, Inc., submitted by American Cyanamid Co., Princeton, NJ; CDL:251506-D)

MRID: 00133549

Kintner, D.; Forbis, A. (1983) Acute Toxicity of AC 243,997 to Bluegill Sunfish (*Lepomis macrochirus*): Static Bioassay Report #30096. (Unpublished study received Dec 15, 1983 under 241-EX- 101; prepared by Analytical Bio-Chemistry Laboratories, Inc., submitted by American Cyanamid Co., Princeton, NJ; CDL:252004-I)

MRID: 00147116

Cohle, P.; McAllister, W. (1984) Acute Toxicity of AC 252,925 to Bluegill Sunfish ...: Static Acute Toxicity Report #32182. Un- published study prepared by Analytical Bio-Chemistry Laboratories, Inc. 59 p.

MRID: 00153777

Cohle, P.; McAllister, W. (1984) Acute Toxicity of Arsenal Herbicide to Bluegill Sunfish (*Lepomis macrochirus*): Static Acute Toxicity Report #32179. Unpublished study prepared by Analytical Bio-Chemistry Laboratories, Inc. 62 p.

MRID: 00153778

Cohle, P.; McAllister, W. (1984) Acute Toxicity of Arsenal Herbicide to Rainbow Trout (*Salmo gairdneri*): Static Acute Toxicity Report #32180. Unpublished study prepared by Analytical Bio-Chemistry Laboratories, Inc. 62 p.

MRID: 45119713

Drottar, K.; Swigert, J.; Wisk, J. (1995) Acute Toxicity of Arsenal Herbicide to the Rainbow Trout (*Oncorhynchus mykiss*) Under Flow-Through Test Condition: Lab Project Number: 954-94-127: 130A-107: 0199. Unpublished study prepared by American Cyanamid Company and Wildlife International Ltd. 73 p. {OPPTS 850.1075}

MRID: 93048008

Gagne, J. (1990) American Cyanamid Company Phase 3 Summary of MRID 00131630. Acute Toxicity of AC 243,997 to Bluegill Sunfish (*Lepomis macrochirus*). Prepared by Analytical Bio-Chemistry Labs, Inc. 21 p.

MRID: 93048009

Gagne, J. (1990) American Cyanamid Company Phase 3 Summary of MRID 00131629. Acute Toxicity of AC 243,997 to Rainbow Trout (*Salmo gairdneri*). Prepared by Analytical Bio-Chemistry Labs Inc. 21 p.

Guideline: 72-2 Acute Toxicity to Freshwater Invertebrates

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MRID: 00131632

Kintner, D.; Forbis, A. (1983) Acute Toxicity of AC 243,997 to *Daphnia magna*: Static Acute Bioassay Report #30098. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Analytical Bio-Chemistry Laboratories, Inc., submitted by American Cyanamid Co., Princeton, NJ; CDL:251506-E)

MRID: 00133550

Kintner, D.; Forbis, A. (1983) Acute Toxicity of AC 243,997 to *Daphnia magna*: Static Bioassay Report #30098. (Unpublished study received Dec 15, 1983 under 241-EX-101; prepared by Analytical Bio-Chemistry Laboratories, Inc., submitted by American Cyanamid Co., Princeton, NJ; CDL:252004-K)

MRID: 00147117

Forbis, A.; Burgess, D.; Georgie, L. (1984) Acute Toxicity of AC 252,925 to *Daphnia magna*: Static Acute Toxicity Report #32183. Unpublished study prepared by Analytical Bio-Chemistry Laboratories, Inc. 43 p.

MRID: 00153779

Forbis, A.; Burgess, D.; Georgie, L. (1984) Acute Toxicity of Arsenal Herbicide to *Daphnia magna*: Static Acute Toxicity Report #32181. Unpublished study prepared by Analytical Bio-Chemistry Laboratories, Inc. 49 p.

MRID: 93048010

Gagne, J. (1990) American Cyanamid Company Phase 3 Summary of MRID 00131632. Acute Toxicity of AC 243,997 to *Daphnia magna*. Prepared by Analytical BioChemistry Labs, Inc. 20 p.

Guideline: 72-4 Fish Early Life Stage/Aquatic Invertebrate Life Cycle Study

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MRID: 41315804

Manning, C. (1989) Chronic Toxicity Estimate of AC 243,997 to Rainbow Trout (*Salmo gairdneri*) under Flow through Conditions: Final Report: Lab Report No. 87384-0600-2130; AC 243,997/RT; Protocol 971-87-155. Unpublished study prepared by Environmental Science and Engineering, Inc. (ESE). 45 p.

MRID: 41315805

Manning, C. (1989) Chronic Effect of AC 243,997 to the Water Flea (*Daphnia magna*) in a 21-day Flow-through Exposure: Final Report: Lab Report No. 87384-0500-2130; AC 243,997/DM; Protocol 020F. Unpublished study prepared by Environmental Science and Engineering, Inc. (ESE). 44 p.

MRID: 43889102

Hughes, J.; Alexander, M.; Conder, L. et al. (1995) Non-Target Aquatic Species Growth and Reproduction Study on the Isopropylamine Salt Formulation of Imazapyr: Lab Project Number: ECO 94-167: ECO 94-166: ECO 94-169. Unpublished study prepared by Carolina Ecotox, Inc. 210 p.

MRID: 45119711

Drottar, K.; Olivieri, C.; Swigert, J. et al. (1998) Toxicity of AC 243997 During the Early Life-Stages of the Fathead Minnow (*Pimephales promelas*): Lab Project Number: ECO 97-102: 954-97-137: 197.05. Unpublished study prepared by American Cyanamid Company and Wildlife International Ltd. 154 p. {OPPTS 850.1400}

MRID: 93048014

Gagne, J. (1990) American Cyanamid Company Phase 3 Summary of MRID 41315804. Chronic Toxicity of AC 243,997 to Rainbow Trout under Flow Through Conditions. Prepared by Environmental Science and Engineering. 25 p.

MRID: 93048015

Gagne, J. (1990) American Cyanamid Company Phase 3 Summary of MRID 41315805. Chronic Toxicity of AC 243,997 to the Water Flea (*Daphnia magna*) in a 21 Day Flow Through Exposure Test. Prepared by Environmental Science and Engineering. 20 p

Guideline: 72-5 Life cycle fish

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MRID: 45119712

Drottar, K.; Olivieri, C.; Krueger, H. (1999) Toxicity of AC 243997 (Imazapyr) Technical During the Full Life-Cycle of the Fathead Minnow (*Pimephales promelas*) Under Flow-Through Test Conditions: Lab Project Number: ECO 97-101: 130A-113: 954-97-101. Unpublished study prepared by American Cyanamid Company and Wildlife International Ltd. 176 p. {OPPTS 850.1500}

Guideline: 81-1 Acute oral toxicity – Rat

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MRID: 00132030

Fischer, J. (1983) Toxicity Data Report: (2-(4-Isopropyl-4-methyl- 5-oxo-2-imidazolin-2-yl) Nicotinic Acid: Rats and Rabbits): Report No. A83-24. (Unpublished study received Oct 6, 1983 under 241-273; submitted by American Cyanamid Co., Princeton, NJ; CDL:251502-B).

MRID: 00132031

Fischer, J. (1983) Toxicity Data Report: (Isopropylamine Salt of 2- (4-isopropyl-4-methyl-5-oxo-2-imadazolin-2-yl) Nicotinic Acid: Rats and Rabbits): Report No. A83-30. (Unpublished study received Oct 6, 1983 under 241-273; submitted by American Cyanamid Co., Princeton, NJ; CDL:251502-C)

MRID: 00147049

Fischer, J. (1984) Summary of Experimental Results: (Acute Toxicity: Arsenal Technical): Report No. A84-52. Unpublished study prepared by American Cyanamid Co. 5 p.

MRID: 00162964

Fischer, J. (1986) Toxicity Data Report: Arsenal Herbicide 5% Granular Formation: Report No. A86-6. Unpublished compilation prepared by American Cyanamid Co. 5 p.

MRID: 40070301

Fischer, J. (1987) Acute Toxicology of Arsenal 0.5-G Herbicide: Laboratory Report No. A86/57. Unpublished compilation prepared by American Cyanamid Co. 10 p.

MRID: 41360302

Rogers, B. (1989) The Acute Oral Toxicity of CC-16692 (SX-CP-89-1) in Adult Male and Female Rats: Study Nos. S-3193; CEHC 3078. Unpublished study prepared by Chevron Environmental Health Center. 14 p.

MRID: 41551002

Fischer, J. (1990) Oral LD50 Study in Albino Rats with AC 243,997: Lab Project Number: T-0222. Unpublished study prepared by American Cyanamid Co. 11 p.

MRID: 43682703

Douds, D. (1994) An Acute Oral Toxicity Study in Rats with EH 1135 PGR: Final Report: Lab Project Number: 3229.79. Unpublished study prepared by Springborn Labs, Inc. 42 p.

MRID: 44116301

Bonnette, K. (1995) An Acute Oral Toxicity Study in Rats with SF18814 (Limit Test): Final Report: Lab Project Number: 3044.507: SB-95-001. Unpublished study prepared by Springborn Labs, Inc. 26 p.

MRID: 46930803

Gamer, A. (2006) BAS 693 29 H - Acute Oral Toxicity Study in Rats. Project Number: 2006/101432, 10A0603/041097. Unpublished study prepared by BASF Aktiengesellschaft, Labor fuer Oekotoxicologie. 21 p.

MRID: 93048016

Fischer, J. (1990) American Cyanamid Company Phase 3 Summary of MRID 41551002. Oral LD50 Study in Albino Rats with AC 243,997. Prepared by American Cyanamid Company. 6 p.

Guideline: 83-3 Teratogenicity -- 2 Species

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MRID: 00131611

Salamon, C.; Enloe, P.; Mayhew, D.; et al. (1983) Teratology Study in Albino Rats with AC 243,997: Toxigenics' Study 450-1222. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Toxigenics, Inc., submitted by American Cyanamid Co., Princeton, NJ; CDL:251504-A)

MRID: 00131612

Salamon, C.; Enloe, P.; Taylor, G.; et al. (1983) Teratology Pilot Study in Albino Rats with AC 243,997: Toxigenics' Study 450-1221. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Toxigenics, Inc., submitted by American Cyanamid Co., Princeton, NJ; CDL:251504-B)

MRID: 00131613

Salamon, C.; Enloe, P.; Becker, S.; et al. (1983) Teratology Study in Albino Rabbits with AC 243,997: Toxigenics' Study 450-1224. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Toxigenics, Inc., submitted by American Cyanamid Co., Princeton, NJ; CDL:251504-C)

MRID: 00131614

Salamon, C.; Enloe, P.; Becker, S.; et al. (1983) Teratology Pilot Study in Albino Rabbits with AC 243,997: Toxigenics' Study 450-1223. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Toxigenics, Inc., submitted by American Cyanamid Co., Princeton, NJ; CDL:251504-D)

MRID: 93048023

Traul, K. (1990) American Cyanamid Company Phase 3 Summary of MRID 00131612 and Related MRIDs 00131611. Teratogenesis Study in Rats with AC243997. Prepared by Toxigenics Inc. 23 p.

MRID: 93048024

Traul, K. (1990) American Cyanamid Company Phase 3 Summary of MRID

MRID: 00131614 and Related MRIDs 00131613

Teratology Study with AC243,997 in Rabbits. Prepared by Toxigenics, Inc. 17 p.

Guideline: 83-4 2-generation repro.-rat

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MRID: 41039505

Robinson, K. (1987) A 2-Generation (2-Litter) Reproduction Study of AC 243,997 Administered in the Diet of the Rat: Report No. 82408. Unpublished study prepared by Bio-Research Laboratories Ltd. 1194 p.

Guideline: 122-1 Seed Germination/Seedling Emergence and Vegetative Vigor

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MRID: 40003711

Malefyt, T. (1986) The Effect of Arsenal on Seed Germination, Seed-ling Emergence and Vegetative Vigor: DIS-P Vol. 6-15. Unpub- lished study prepared by American Cyanamid Co. 23 p.

Guideline: 123-1 Seed Germination/Seedling Emergence and Vegetative Vigor

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MRID: 40811801

American Cyanamid Co. (1988) The Effect of Arsenal on Non-target Terrestrial Plants: Tier II. Unpublished compilation. 172 p.

MRID: 40811802

Hughes, J. (1987) The Effect of Arsenal on Non-target Aquatic Plants: Tier II: Laboratory Project ID: 0214-67-1100-1,2,3,4. Unpublished compilation prepared by Malcolm Pirnie, Inc. 180 p.

MRID: 43889101

Christensen, G.; Canez, V.; Feutz, E. (1995) Tier 2 Non-Target Vegetative Vigor Phytotoxicity Study Using AC 252,925 in a 2AS Formulation: Lab Project Number: 42125: 954-94-168: ECO 94-170. Unpublished study prepared by ABC Labs, Inc. 166 p.

MRID: 93048029

Malefyt, T. (1990) American Cyanamid Company Phase 3 Summary of MRID 40811801. The Effect of ARSENAL on Non-target Terrestrial Plants. Prepared by American Cyanamid Company. 17 p.

MRID: 93048030



Malefyt, T. (1990) American Cyanamid Company Phase 3 Summary of MRID 40811801. The Effect of ARSENAL on Non-target Terrestrial Plants. Prepared by American Cyanamid Company. 14 p.

Guideline:123-2 Aquatic plant growth

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MRID: 43889102

Hughes, J.; Alexander, M.; Conder, L. et al. (1995) Non-Target Aquatic Species Growth and Reproduction Study on the Isopropylamine Salt Formulation of Imazapyr: Lab Project Number: ECO 94-167: ECO 94-166: ECO 94-169. Unpublished study prepared by Carolina Ecotox, Inc. 210 p.

MRID: 93048031

Gagne, J. (1990) American Cyanamid Company Phase 3 Summary of MRID 40811802. Aquatic Plant Protection Studies with AC 243,997. Prepared by Malcolm Pirnie, Inc. 44 p.

Guideline: 124-2 Aquatic field

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MRID: 00131628

Citation: American Cyanamid Co. (1983) Summary: Fish and Wildlife Data: AC 243,997. (Compilation; unpublished study received Oct 6, 1983 under 241-273; CDL:251506-A)

MRID: 00131629

Citation: Kintner, D.; Forbis, A. (1983) Acute Toxicity of AC 243,997 to Rainbow Trout (*Salmo gairdneri*): Static Bioassay Report #30095. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Analytical Bio-Chemistry Laboratories, Inc., submitted by American Cyanamid Co., Princeton, NJ; CDL:251506-B)

MRID: 40811802

Hughes, J. (1987) The Effect of Arsenal on Non-target Aquatic Plants: Tier II: Laboratory Project ID: 0214-67-1100-1,2,3,4. Unpublished compilation prepared by Malcolm Pirnie, Inc. 180 p.

Guideline 141-1 Terrestrial Invertebrate

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MRID: 00131637

Citation: Atkins, E. (1983) Letter sent to T. Peoples dated Apr 16, 1983 ?Honeybee toxicity study with AC 243,997|. (Unpublished study received Oct 6, 1983 under 241-273; prepared by Univ. of Cali- fornia--Riverside, Dept. of Entomology, submitted by American Cyanamid Co., Princeton, NJ; CDL:251506-J)

MRID: 00133554

Citation: Atkins, E.; Kellum (1983) Bee Adult Toxicity Dusting Test Summary: Test No. 389. (Unpublished study received Dec 15, 1983 under 241-EX-101; prepared by Univ. of California--Riverside, Dept. of Entomology, submitted by American Cyanamid Co., Princeton, NJ; CDL:252004-O)

MRID: 00147114

Citation: American Cyanamid Co. (1985?) Summary: Fish and Wildlife--Additional Data for Full Registration of Arsenal Herbicide for Noncrop Uses. Unpublished study. 2 p.

MRID: 00153780

Atkins, E. (1984) Bee Adult Toxicity Dusting Test Summary [and Test Data Using Arsenal Herbicide]: BADTD No. 414: Summary Sheet No. 766. Unpublished study prepared by University of CA., River- side, Dept. of Entomology. 11 p.

MRID: 93048032

Gagne, J. (1990) American Cyanamid Company Phase 3 Summary of MRID 00131637. AC243,997: Acute Toxicity to Honey Bees (*Apis mellifera*). Prepared by University of CA.-Riverside. 27 p.