

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

Annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2003

Commission File Number 1-5725

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

Quanex Corporation Piper Impact 401(k) Plan

B. Name of the issuer of the securities held pursuant to the plan and the address of its principal executive office:

Quanex Corporation
1900 West Loop South, Suite 1500
Houston, TX 77027

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Benefits Committee
Quanex Corporation
Houston, Texas

Re: Quanex Corporation Piper Impact 401(k) Plan

We have audited the accompanying statements of net assets available for benefits of the Quanex Corporation Piper Impact 401(k) Plan ("the Plan") as of December 31, 2003 and 2002, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2003 and 2002, and the changes in net assets available for benefits for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2003 is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental schedule is the responsibility of the Plan's management. This supplemental schedule has been subjected to the auditing procedures applied in our audits of the basic financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

/s/ DELOITTE & TOUCHE, LLP

DELOITTE & TOUCHE, LLP

Houston, Texas
June 23, 2004

QUANEX CORPORATION
PIPER IMPACT 401(k) PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

	DECEMBER 31,	
	2003	2002
Assets:		
Investments at fair value (see Note C)	\$ 6,982,082	\$ 6,658,159
Participant loans	351,079	447,827
Employee contributions receivable	40,771	56,232
Employer contributions receivable	7,896	11,810
	48,667	68,042
Net assets available for benefits	\$ 7,381,828	\$ 7,174,028

See notes to financial statements.

**QUANEX CORPORATION
PIPER IMPACT 401(k) PLAN**

**STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE
FOR BENEFITS**

	DECEMBER 31,	
	2003	2002
Investment income:		
Interest and dividends	\$ 105,080	\$ 104,573
Net appreciation (depreciation) in fair value of investments (see Note C)	1,168,823	(1,022,151)
	1,273,903	(917,578)
Contributions:		
Employer (net of forfeitures)	75,566	340,744
Employee	638,338	847,428
	713,904	1,188,172
Interest on participant loans	23,552	32,082
Total additions	2,011,359	302,676
Benefit payments	1,797,853	702,398
Administrative fees (see Note D)	5,706	6,115
Total deductions	1,803,559	708,513
Increase (decrease) in net assets available for benefits	207,800	(405,837)
Net assets available for benefits:		
Beginning of year	7,174,028	7,579,865
End of year	\$ 7,381,828	\$ 7,174,028

See notes to financial statements.

QUANEX CORPORATION
PIPER IMPACT 401(k) PLAN
EIN: 38-1872178; PN 001

Schedule H, Line 4i — Schedule of Assets (Held at End of Year)
December 31, 2003

(a)	(b) Identity of issue, borrower, lessor or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par, or maturity value	(d) Cost	(e) Current Value
*	Fidelity	Puritan Fund	\$ 663,755	\$ 675,737
*	Fidelity	Magellan Fund	223,657	206,393
*	Fidelity	Contrafund	951,816	978,967
*	Fidelity	Growth & Income Fund	75,589	74,260
*	Fidelity	Independence Fund	606,355	534,843
*	Fidelity	Overseas Fund	35,671	36,607
*	Fidelity	Balanced Fund	84,798	91,854
*	Fidelity	Blue Chip Fund	2,181,471	2,066,538
*	Fidelity	Asset Manager Fund	304,637	290,187
*	Fidelity	Low-Priced Stock Fund	127,383	156,212
*	Fidelity	Government Money Market Fund	802,369	802,369
	Templeton	Foreign Fund	18,632	21,064
	Neuberger & Berman	Partners Trust Fund	1,183	1,248
		Total Mutual Fund Assets	6,077,316	5,936,279
*	Quanex Corporation	Unitized common stock	213,379	362,067
*	Fidelity	Managed Income Portfolio	683,736	683,736
*	Participant loans	Loan maturing with 2-7 years, bearing interest at 5.25% to 9.50%		351,079
		Total Investments	\$ 6,974,431	\$ 7,333,161

* Party-in-Interest

QUANEX CORPORATION
PIPER IMPACT 401(k) PLAN

NOTES TO FINANCIAL STATEMENTS

YEARS ENDED DECEMBER 31, 2003 AND 2002

A. DESCRIPTION OF THE PLAN

The following description of the Piper Impact 401(k) Plan (the "Plan") provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

- (1) *General.* The Plan is a defined contribution plan which covers substantially all full-time employees of Piper Impact, a division of Quanex Corporation (the "Company"). The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA"). The assets of the Plan are held in trust by Fidelity Management Trust Company ("Fidelity" or the "Trustee"). The Benefits Committee (the "Committee"), appointed by Quanex Corporation's Board of Directors, serves as the Plan administrator.
- (2) *Contributions.* Participants may contribute to the Plan by electing salary deferrals up to 50% of compensation as defined by the Plan document. The Company contributes 25% of the first 6% of base compensation that a participant contributes to the Plan. Contributions are subject to certain limitations. Up until September 30, 2002, the Company made a supplemental contribution on behalf of employees with at least three months of service, based on company profits and calculated based on a percentage of the employee's compensation.
- (3) *Participant Accounts.* Each participant's account is credited with the participant's contribution and allocations of the Company's contribution and Plan earnings, and charged with an allocation of administrative expenses. Allocations are based on participant earnings or account balances, as defined by the plan. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.
- (4) *Vesting and Forfeitures.* Participants are immediately vested in their contributions and earnings thereon. Vesting in the Company's matching and discretionary contribution portion of their accounts plus actual earnings thereon is based on years of continuous service. A participant is 20% vested for each year of credited service beginning with his or her first year and is 100% vested after five years of credited service. Forfeited balances of terminated participants' non-vested accounts are used to reduce current or future Company contributions. Amounts forfeited during 2003 and 2002 were \$52,674 and \$64,648, respectively. The amount available for use in the forfeiture account totaled \$1,792 and \$2,731 at December 31, 2003 and 2002, respectively.
- (5) *Payment of Benefits.* The Plan is intended for long-term savings but provides for early withdrawals and loan arrangements under certain conditions. In accordance with the Code, upon termination of service, a participant may elect to receive a lump-sum distribution equal to the total amount of vested benefits in his or her account. Terminated participants with an account balance of less than \$5,000 will automatically receive a lump sum distribution.
- (6) *Loans.* Loans may be granted to a participant of the Plan at the Committee's discretion. Loan terms range up to five years or ten years if used for the purchase of a primary residence. The loans bear a reasonable rate of interest established by the Committee. Interest on the loan is allocated to the borrower's participant account.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

- (1) *Accounting Basis.* The financial statements of the Plan are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America.
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(2) *Investment Valuation.* The Plan recognizes net appreciation or depreciation in the fair value of its investments. Investments are reflected at fair value in the financial statements. Fair value of mutual fund assets is determined using a quoted net asset value. Fair value for Quanex Corporation common stock, which is listed on the New York Stock Exchange, is determined by using the last recorded sales price. The recorded value of the common/commingled trust is at face value, which is fair value.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Management fees and operating expenses charged to the Plan for investments in the mutual funds are deducted from income earned on a daily basis and are not separately reflected. Consequently, management fees and operating expenses are reflected as a reduction of investment return for such investments.

(3) *Use of Estimates.* The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein and disclosure of contingent assets and liabilities. Actual results could differ from these estimates.

(4) *Administrative Expenses.* The Company pays the administrative expenses of the Plan, except loan set up and carrying fees and redemption fees imposed on certain Fidelity funds.

(5) *Payment of Benefits.* Benefit payments are recorded when paid.

(6) *Risks and Uncertainties.* The Plan utilizes various investment instruments, including mutual funds and common stock. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

C. INVESTMENTS

The following are investments that represent 5 percent or more of the Plan's net assets available for benefits.

	December 31, 2003		December 31, 2002	
	Shares	Amount	Shares	Amount
Fidelity Puritan Fund	36,586	\$ 675,737	42,075	\$ 664,364
Fidelity Contrafund	19,837	978,967	25,869	998,547
Fidelity Independence Fund	33,303	534,843	35,393	462,584
Fidelity Blue Chip Fund	52,146	2,066,538	60,381	1,928,576
Fidelity Government Money Market Fund	802,369	802,369	867,189	867,189
Fidelity Managed Income Portfolio	683,736	683,736	549,357	725,747

During the years ended December 31, 2003 and 2002, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated / (depreciated) in value as follows:

	2003	2002
Mutual funds	\$ 1,057,895	\$ (1,070,222)
Quanex unitized common stock	110,928	48,071
	\$ 1,168,823	\$ (1,022,151)

D. RELATED PARTY TRANSACTIONS

Certain Plan investments are shares of mutual funds managed by Fidelity. Fidelity is the trustee as defined by the Plan and, therefore, these transactions qualify as party-in-interest transactions. Fees paid by the Plan for the investment management services amounted to \$5,706 and \$6,115 for the years ended December 31, 2003 and 2002, respectively. In addition, the Plan invests in shares of Quanex Corporation unitized common stock. Quanex Corporation is the Plan sponsor as defined by the Plan and, therefore, these transactions also qualify as party-in-interest transactions. As of December 31, 2003 and 2002, the value of Quanex Corporation unitized common stock held by the Plan was \$362,067 and \$335,697, respectively.

E. PLAN TERMINATION

Although it has not expressed any intention to do so, the Company has the right under the Plan to terminate the Plan at any time subject to the provisions set forth in ERISA. In the event of Plan termination, the assets held by the Trustee under the Plan will be valued and fully vested, and each participant will be entitled to distributions respecting his or her account.

F. FEDERAL INCOME TAX STATUS

The Plan is subject to specific rules and regulations related to employee benefit plans under the Department of Labor and the Internal Revenue Service. The Plan has received a favorable letter of tax determination dated August 19, 2002. As such, the Plan is qualified under Section 401(a) of the Internal Revenue Code (the "Code") and, as a result, the trust is exempt from federal income tax under Section 501(a) of the Code. The Company believes the Plan is currently designed and being operated in compliance with the applicable requirements of the Code. The Company believes the Plan was qualified and the related trust was tax-exempt as of the financial statement dates.

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Quanex Corporation Piper Impact 401(k) Plan

Date: June 28, 2004

/s/ Ricardo Arredondo

Ricardo Arredondo, Benefits Committee

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23.1 Consent of Independent Registered Public Accounting Firm

99.1 Certification by chief executive officer and chief financial officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-22977 of Quanex Corporation on Form S-8 of our report dated June 23, 2004, appearing in this Annual Report on Form 11-K of the Quanex Corporation Piper Impact 401(k) Plan for the year ended December 31, 2003.

/s/ DELOITTE & TOUCHE, LLP

DELOITTE & TOUCHE, LLP

Houston, Texas

June 23, 2004

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[Exhibit 23.1](#)

[CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM](#)

**CERTIFICATION PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

We hereby certify that the accompanying Report of Quanex Corporation Piper Impact 401(k) Plan (the "Plan") on Form 11-K for the year ended December 31, 2003 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Report fairly presents, in all material respects, the financial condition and results of operations of the Plan.

June 28, 2004

/s/ RAYMOND A. JEAN

/s/ TERRY M. MURPHY

Raymond A. Jean
*Chairman of the Board, President and
Chief Executive Officer*

Terry M. Murphy
*Vice President—Finance and
Chief Financial Officer*

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[CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002](#)