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 Hourly Bargaining Unit Employees Savings 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 Hourly Bargaining Unit Employees Savings Plan

We have audited the accompanying statements of net assets available for benefits of the Quanex Corporation Hourly Bargaining Unit Employees Savings 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 HOURLY BARGAINING UNIT EMPLOYEES SAVINGS PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

		DECEMBER 31,			
		2003	2002		
Assets:					
Investments at fair value (see Note C)	\$	14,261,690	\$ 11,835,194		
Employee contributions receivable		103,530	91,122		
	_				
Net assets available for benefits	\$	14,365,220	\$ 11,926,316		
	_				

See notes to financial statements.

QUANEX CORPORATION HOURLY BARGAINING UNIT EMPLOYEES SAVINGS PLAN

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

DECEMBER 31,				
	2003		2002	
\$	180,368	\$	175,831	
	2,082,028		(1,773,802)	
	2,262,396		(1,597,971)	
	1,305,308		1,464,366	
	3,567,704		(133,605)	
	907,603		1,253,464	
	25		25	
	907,628		1,253,489	
	(221,172)		(343,202)	
	2,438,904		(1,730,296)	
	11,926,316		13,656,612	
\$	14,365,220	\$	11,926,316	
		2003 \$ 180,368 2,082,028 2,262,396 1,305,308 3,567,704 907,603 25 907,628 (221,172) 2,438,904 11,926,316	2003 \$ 180,368 \$ 2,082,028 2,262,396 1,305,308 3,567,704 907,603 25 907,628 (221,172) 2,438,904 11,926,316	

See notes to financial statements.

QUANEX CORPORATION HOURLY BARGAINING UNIT EMPLOYEES SAVINGS PLAN EIN: 38-1872178; PN 015

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	\$	1,227,884	\$	1,269,555	
*	Fidelity	Magellan Fund	Ψ	3,653,879	Ψ	3,440,572	
*	Fidelity	Contrafund		901,041		961,781	
*	Fidelity	Growth & Income Fund		1,255,793		1,148,625	
*	Fidelity	Independence Fund		1,402,169		1,028,716	
*	Fidelity	Overseas Fund		325,633		332,523	
*	Fidelity	Balanced Fund		408,011		443,355	
*	Fidelity	Blue Chip Fund		873,619		829,421	
*	Fidelity	Asset Manager Fund		41,368		43,543	
*	Fidelity	Low-Priced Stock Fund		373,342		444,746	
*	Fidelity	Government Money Market Fund		2,679,858		2,679,858	
	Templeton	Foreign Fund		214,314		237,272	
	Neuberger & Berman	Partners Trust Fund		62,630		66,525	
	5			,		,	
		Total Mutual Fund Assets		13,419,541		12,926,492	
*	Quanex Corporation unitized c	ommon stock		370,158		660,703	
*	Fidelity	Managed Inconme Portfolio		674,495		674,495	
		Total Investments	\$	14,464,194	\$	14,261,690	
			φ	14,404,194	φ	14,201,090	

* Party-in-Interest

QUANEX CORPORATION HOURLY BARGAINING UNIT EMPLOYEES SAVINGS PLAN

NOTES TO FINANCIAL STATEMENTS

YEARS ENDED DECEMBER 31, 2003 AND 2002

A. DESCRIPTION OF THE PLAN

The following description of the Quanex Corporation Hourly Bargaining Unit Employees Savings Plan (the "Plan") provides only general information. Participants should refer to the Plan document for more complete information.

- (1) General. The Plan is a defined contribution plan which covers hourly paid union employees of the MACSTEEL divisions of the Quanex Corporation (the "Company"). The Plan is subject to the Employee Retirement Income Security Act of 1974 ("ERISA"). Fidelity Management Trust Company ("Fidelity" or the "Trustee") holds the assets of the Plan in trust. The Benefits Committee (the "Committee"), appointed by the Company's Board of Directors, serves as the Plan administrator.
- (2) Contributions. Participants may elect to contribute up to 15 percent of their before-tax or after-tax compensation as defined by the Plan agreement.
- (3) *Participant Accounts.* Each participant's account is credited with the participant's contribution and an allocation of investment income, which is based on individual participant account balances as of the end of the period in which the income is earned.
- (4) *Vesting.* Participants are immediately vested in their contributions and the related earnings.
- (5) *Payment of Benefits.* Upon termination of service, the 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.

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.
- (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.

	Deceml	December 31, 2003			December 31, 2002			
	Shares		Amount	Shares	Amount			
Fidelity Puritan Fund	68,736	\$	1,269,555	64,308	\$	1,051,425		
Fidelity Magellan Fund	35,201		3,440,572	37,071		2,927,104		
Fidelity Contrafund	19,489		961,781	18,111		699,090		
Fidelity Growth & Income Fund	32,236		1,148,625	30,210		915,666		
Fidelity Independence Fund	64,055		1,028,716	67,500		882,225		
Fidelity Government Money Market Fund	2,679,858		2,679,858	2,808,535		2,808,535		
Fidelity Blue Chip Fund	20,929		829,421	*15,869		*506,859		
Quanex Corporation Unitized Stock	*30,903		*660,703	48,764		763,159		
* presented for comparative purposes only								

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	\$	1,907,97	7 \$	(1,890,007)	
Quanex unitized common stock		174,05	1	116,205	
	-				
	\$	2,082,028	3 \$	(1,773,802)	
	_				

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. 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 common stock held by the Plan was \$660,703 and \$763,159, 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 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.

G. TRANSFER OF ASSETS

Account balances of \$(221,172) and \$(343,202) were transferred between the Plan and the Quanex Corporation Employee Saving Plan in plan years 2003 and 2002, respectively.

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 Hourly Bargaining Unit Employees Savings Plan

Date: June 28, 2004

/s/ Ricardo Arredondo

Ricardo Arredondo, Benefits Committee

INDEX TO EXHIBITS

- 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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 REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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 BENEFITS

 QUANEX CORPORATION HOURLY BARGAINING UNIT EMPLOYEES SAVINGS PLAN STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE

 FOR BENEFITS

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

 NOTES TO FINANCIAL STATEMENTS YEARS ENDED DECEMBER 31, 2003 AND 2002

 SIGNATURES

 INDEX TO EXHIBITS

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 33-46824 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 Hourly Bargaining Unit Employees Savings 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 Hourly Bargaining Unit Employees Savings 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

Raymond A. Jean Chairman of the Board, President and Chief Executive Officer /s/ TERRY M. MURPHY

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

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Exhibit 99.1

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