SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

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

For the fiscal year ended December 31, 2005

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

To the Benefits Committee Quanex Corporation

Re: Quanex Corporation Hourly Bargaining Unit Employees Savings Plan

We have audited the accompanying statements of net assets available for benefits of Quanex Corporation Hourly Bargaining Unit Employees Savings Plan (the "Plan") as of December 31, 2005 and 2004, 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 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. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, 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, 2005 and 2004, 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 supplemental schedule of assets (held at year end) as of December 31, 2005, 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. This schedule is the responsibility of the Plan's management. Such schedule has been subjected to the auditing procedures applied in our audit of the basic 2005 financial statements and, in our opinion, is 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

June 21, 2006

QUANEX CORPORATION HOURLY BARGAINING UNIT EMPLOYEES SAVINGS PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

	DECEMBER 31,			
	 2005		2004	
ASSETS:				
Participant-directed investments (see Note C)	\$ 21,499,943	\$	19,474,280	
Receivables:				
Employee contributions receivable	 200,179		244,855	
NET ASSETS AVAILABLE FOR BENEFITS	\$ 21,700,122	\$	19,719,135	

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QUANEX CORPORATION HOURLY BARGAINING UNIT EMPLOYEES SAVINGS PLAN

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

		DECEMBER 31, 2005 2004		
ADDITIONS:		2004		
Contributions:				
Employee	\$ 2,428,862	\$ 4,342,600		
Total contributions	2,428,862	4,342,600		
Investment income:				
Interest and dividends	850,841	367,570		
Net appreciation in fair value of investments (see Note C)	639,263	1,511,005		
Net investment income	1,490,104	1,878,575		
Total additions	3,918,966	6,221,175		
DEDUCTIONS:				
Benefits paid to participants	1,514,550	871,055		
Administrative fees (see Note D)	99	27		
Total deductions	1,514,649	871,082		
INCREASE IN NET ASSETS	2,404,317	5,350,093		
	(122,220)	0.000		
TRANSFERS BETWEEN PLANS (SEE NOTE G)	(423,330)	3,822		
NET ASSETS AVAILABLE FOR BENEFITS:				
	19,719,135	14 265 220		
Beginning of year	19,719,135	14,365,220		
End of year	\$ 21,700,122	\$ 19,719,135		
	\$ 21,700,122	\$ 19,719,155		

Schedule H, Line 4i - Schedule of Assets (Held at End of Year) December 31, 2005

(a)	(b) Identity of issue, borrower, lessor	(c) Description of investment including maturity date, rate of interest,		(d)		(e) Current
.1.	or similar party	collateral, par, or maturity value	<u>_</u>	Cost	<u></u>	Value
*	Fidelity	Puritan Fund	\$	1,821,207	\$	1,879,817
*	Fidelity	Magellan Fund		4,185,055		4,354,596
*	Fidelity	Contrafund		1,586,934		2,063,134
*	Fidelity	Growth & Income Fund		1,946,644		1,781,704
*	Fidelity	Independence Fund		1,095,638		1,011,412
*	Fidelity	Overseas Fund		483,340		620,210
*	Fidelity	Balanced Fund		735,166		827,840
*	Fidelity	Blue Chip Fund		1,169,312		1,226,661
*	Fidelity	Asset Manager Fund		197,028		199,689
*	Fidelity	Low-Priced Stock Fund		1,070,989		1,240,510
*	Fidelity	Government Money Market Fund		3,069,116		3,069,116
	Templeton	Foreign Fund		353,011		428,347
	Neuberger & Berman	Partners Trust Fund		228,482		262,710
		Total Mutual Fund Assets		17,941,922		18,965,746
*	Quanex Corporation	Unitized common stock		104,461		1,586,612
*	Fidelity	Common/Commingled trust		926,869		926,869
	Participant loans	Loan maturing within 3 to 5 years, bearing interest at 5.0% to 10.5%				
				20,716		20,716
			-			
		Total Investments	\$	18,993,968	\$	21,499,943
					-	

* Party-in-Interest

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QUANEX CORPORATION HOURLY BARGAINING UNIT EMPLOYEES SAVINGS PLAN

NOTES TO FINANCIAL STATEMENTS YEARS ENDED DECEMBER 31, 2005 AND 2004

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) <u>General</u>. The Plan is a defined contribution plan which covers hourly paid union employees of the MACSTEEL locations 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) <u>Contributions</u>. Participants may elect to contribute up to 50% of their compensation (15% before July 1, 2004) as defined by the Plan, subject to certain Internal Revenue Code ("IRC") limitations, on either a pre-tax or after-tax basis.
- (3) <u>Participant Accounts</u>. Individual accounts are maintained for each Plan participant. Each participant's account is credited with the participant's contribution, and the participant's pro rata share of investment earnings. Participant accounts are also charged with withdrawals, administrative expenses and an allocation of any Plan losses. Investment earnings and losses allocations are based on individual participant account balances as of the end of the period in which the income is earned. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.
- (4) <u>Investments</u>. Participants direct the investment of contributions into various investment options offered by the Plan. The Plan currently offers 13 mutual funds, one common/commingled trust and unitized Quanex stock as investment options for participants
- (5) <u>Vesting</u>. Participants are immediately vested in their contributions and the related earnings.
- (5) <u>Payment of Benefits</u>. The Plan is intended for long-term savings but provides for early withdrawals under certain conditions. 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 \$1,000 will automatically receive a lump sum distribution (\$5,000 before March 28, 2005).
- (6) <u>Participant Loans</u>. No loans shall be made to participants under the Plan. Employees of MACSTEEL Monroe, Inc. who had a loan outstanding under the Cargill Partnership Plan on December 31, 2003 were allowed to roll over the loan to the Plan. Loans' mature within 3 to 5 years and bear interest at 5% to 10.5%.

- (1) <u>Accounting Basis</u>. 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) <u>Investment Valuation</u>. 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 net asset value which is composed of the fair values of the underlying assets held by the trust.

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) <u>Use of Estimates</u>. 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) <u>Administrative Expenses</u>. 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) <u>Payment of Benefits</u>. Benefit payments are recorded when paid.
- (6) <u>Risks and Uncertainties</u>. 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 investments.

	December 31, 2005		Decembe	er 31, 2004
	Shares	Amount	Shares	Amount
Fidelity Magellan Fund	40,911	\$ 4,354,596	39,075	\$ 4,055,561
Fidelity Government Money Market Fund	3,069,116	3,069,116	2,987,677	2,987,677
Fidelity Contrafund	31,858	2,063,134	30,837	1,749,711
Fidelity Puritan Fund	100,364	1,879,817	91,452	1,733,016
Fidelity Growth & Income Fund	51,794	1,781,704	45,327	1,731,926
Quanex Corporation Unitized Stock	31,751	1,586,612	48,551	1,533,728
Fidelity Blue Chip Fund	28,421	1,226,661	26,486	1,104,739
Fidelity Low-Priced Stock Fund	30,375	1,240,510	27,034	1,088,131
Fidelity Independence Fund	* 51,471	*1,011,412	57,170	1,019,338

presented for comparative purposes only

During the years ended December 31, 2005 and 2004, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated in value as follows:

	2005	2004
Mutual funds	\$ 446,794	\$ 1,003,439
Quanex unitized common stock	192,469	507,566
	\$ 639,263	\$ 1,511,005

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, 2005 and 2004, the value of Quanex Corporation common stock held by the Plan was \$1,586,612 and \$1,533,728, 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. Although the Plan has been amended since receiving the determination letter, 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 \$(423,330) and \$(60,829) were transferred between the Plan and the Quanex Corporation Employee Saving Plan in plan years 2005 and 2004, respectively.

Loan balances from employees of MACSTEEL Monroe, Inc. totaling \$64,651 were transferred into the Plan in 2004.

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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 27, 2006

/s/ Thomas M. Walker

Thomas M. Walker, Benefits Committee

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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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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 21, 2006, 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, 2005.

/s/ DELOITTE & TOUCHE LLP DELOITTE & TOUCHE LLP

Houston, Texas June 21, 2006

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, 2005 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 27, 2006

/s/ RAYMOND A. JEAN

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

Thomas M. Walker Senior Vice President—Finance and Chief Financial Officer