Investment Paper (http://www.investpaper.info/)

Best Investment Research Paper

Study on Preparation Procedure for Emamectin Benzoate Microcapsule and Property Characterization

June 1, 2015 by Paper (http://www.investpaper.info/author/paper) in Investment Paper (http://www.investpaper.info/investment-paper)

Title	Study on Preparation Procedure for Emamectin Benzoate Microcapsule and Property Characterization

Search

Categories

- Bank Credit (http://www.investpaper.info/bank-credit)
- Cooperation Between China and Foreign Countries (http://www.investpaper.info/cooperation-between-china-and-foreign-countries)
- Futures, Option (http://www.investpaper.info/futures-option)
- Insurance (http://www.investpaper.info/insurance)
- International Investment (http://www.investpaper.info/international-investment)
- Investment Fund (http://www.investpaper.info/investment-fund)
- Investment Market of Hong Kong, Macao and Taiwan (http://www.investpaper.info/investment-market-of-hong-kong-macao-and-taiwan)
- Investment of Nations (http://www.investpaper.info/investment-of-nations)

Abstract	Microencapsulation is an important technology of production in pesticide formulations. Comparing with conventional pesticide formulations, it has many advantages, such as extending of persistence, reducing of Environmental (http://www.en-thesis.com) pollution and toxicity, reducing the decomposition rate and good efficiency. In recent years, more and more attention is paid to it. Emamectin benzoate (http://www.investpaper.info /tag/emamectin-benzoate) is a super-efficient, broad-spectrum, low toxicity, pollution-free insecticide and miticide,and widely used in pest control in agriculture. However,many factors such as ultraviolet radiation, air temperature and soil Environmental (http://www.en-thesis.com) can promote its decomposition,which limit the use of emamectin benzoate and efficacy. Emamectin benzoate (http://www.investpaper.info /tag/emamectin-benzoate) microcapsule (http://www.investpaper.info /tag/microcapsule)s can avoid forenamed problems. In this study,Using formaldehyde and melamine as wall materials and emamectin benzoate-toluene as core material, microcapsule (http://www.investpaper.info /tag/microcapsule)s were prepared by in-situ polymerization. It was studied that how the factors: mass ratio of melamine to formaldehyde, wall material corresponding conditions, emulsifying, stirring ratio and time, pH value and temperature had an influence on the properties of microcapsule (http://www.investpaper.info /tag/microcapsule)s. Photodegradation of emamectin benzoate microcapsules was studied. Using different viscosity average molecular weight (http://www.investpaper.info/tag/viscosity-

- Investment Paper (http://www.investpaper.info /investment-paper)
- Investment Theory and Practice (http://www.investpaper.info /investment-theory-and-practice)
- Law, Rules of Law and Policy of Investment (http://www.investpaper.info /law-rules-of-law-and-policy-of-investment)
- Real Estate (http://www.investpaper.info /real-estate)
- Regional Investment Market (http://www.investpaper.info /regional-investment-market)
- Securities (http://www.investpaper.info /securities)
- Theory and Practice of Investment Market (http://www.investpaper.info /theory-and-practice-of-investment-market)
- Trust (http://www.investpaper.info /trust)

Recent Posts

- Studies on the Ancient and Modern Principles of Choosing Acupoints of Ocular Connectors Disease with Acupuncture and Moxibustion Treatment (http://www.investpaper.info /113644_03.html)
- The Research of Behaviors and Risks during the Recovery Construction Progress of Sudden Events (http://www.investpaper.info /113642_03.html)
- Traditional semiconductors use of the electronic properties of charg... (http://www.investpaper.info /113640_03.html)
- Relevancy between the Population and Economy at County Level Based on GIS (http://www.investpaper.info

average-molecular-weight) of hydroxyethyl cellulose (http://www.investpaper.info/tag/hydroxyethyl-cellulose) as emulsifier, microcapsules containing emamectin benzoate are prepared by in-situ polymerization. The factors affecting the surface morphology, the particle size and distribution, the encapsulation efficiency and the drug loading was investigated, and the release properties were determined.Encapsulating parameters: Mass ratio of melamine to formaldehyde was 1 to 2, core to wall was 3 to 2, o/w emulsion of 5.0 gram toluene and 2.5 gram emamectin benzoate in HEC aqueous solution was prepared. Using 1% HEC as emulsifying agent, at the stirring ratio 1000r/min, acidifying for 70min, pH value was 5.0, keeping the temperature at 50°Cfor 2 hour, could prepare microcapsules with good surface morphology and uniform particle size range. Fourier-transform infrared spectroscopy (FT-IR) showed that emamectin benzoate had been encapsulated with wall material. The sustained-release characteristic was well by using UV spectrophotometer. The time of sustained-release could be up to 15 days. Photodegradation experiment showed that photodegradation was decreased. After irradiation by UV light,photodegradation ratio of emamectin benzoate technical material was 57.4%,and microcapisulazed emamectin benzoate was 21.5%.In these Microcapsules with different viscosity average molecular weight (http://www.investpaper.info/tag/viscosity-average-molecular-weight) HEC, the morphology of the microcapsules made by small molecular weight hydroxyethyl cellulose (http://www.investpaper.info/tag/hydroxyethyl-cellulose) was rule, dense and had no adhesion phenomenon. The

/113638_03.html)
- Studies on the Photochemistry of Quinolone Dervative on the Gel State (http://www.investpaper.info/113636_03.html)

Archives

- June 2015 (http://www.investpaper.info/date/2015/06)
- May 2015 (http://www.investpaper.info/date/2015/05)
- April 2015 (http://www.investpaper.info/date/2015/04)
- March 2015 (http://www.investpaper.info/date/2015/03)
- February 2015 (http://www.investpaper.info/date/2015/02)
- January 2015 (http://www.investpaper.info/date/2015/01)
- December 2014 (http://www.investpaper.info/date/2014/12)
- November 2014 (http://www.investpaper.info/date/2014/11)
- October 2014 (http://www.investpaper.info/date/2014/10)

Tags

Asset securitization (http://www.investpaper.info/tag/asset-securitization) behavioral finance (http://www.investpaper.info/tag/behavioral-finance) Capital market (http://www.investpaper.info/tag/capital-market) Capital structure (http://www.investpaper.info/tag/capital-structure) Commercial bank (http://www.investpaper.info/tag/commercial-bank) Commercial banks (http://www.investpaper.info/tag/commercial-banks) Corporate Governance (http://www.investpaper.info

	microcapsules particle size and the size distribution increased with the viscosity average molecular weight of hydroxyethyl cellulose (http://www.investpaper.info/tag/hydroxyethyl-cellulose) increasing. The average particle size of microcapsules was 5.70μm by using HEC with viscosity average molecular was 90000. Drug loading and encapsulation efficiency was significantly affected by using HEC with different viscosity average molecular. With the viscosity average molecular weight of hydroxyethyl cellulose increasing, the encapsulation efficiency and the drug loading were decreased. Microcapsules using viscosity average molecular was 90000 had the greatest encapsulation efficiency and drag loading,respectively 84.03% and 23.46%.It was showed that the release performance of the microcapsules which prepared by small molecular weight hydroxyethyl cellulose were better. Accumulative release rate of microcapsules using viscosity average molecular was 90000 and 250000 was better than microcapsules using viscosity average molecular was 720000 and 1300000.The results of field trial indicted emamectin benzoate 3%CS had good control effect. The results showed that the rapid effect of CS was less than EC.After using 14 days, controlled release properties of CS took effect. The control effect of CS was better than EC after 21 days. The suitable dosage of 3% emamectin benzoate CS was 6g/mu.
Category	Investment Paper (http://www.investpaper.info/investment-paper)
Subject	Emamectin benzoate, hydroxyethyl cellulose, in situ polymerization, microcapsule, viscosity average molecular weight,
FileType	PDF

/tag/corporate-governance) countermeasure (http://www.investpaper.info/tag/countermeasure) Countermeasures (http://www.investpaper.info/tag/countermeasures) Credit Risk (http://www.investpaper.info/tag/credit-risk) Development (http://www.investpaper.info/tag/development) economic growth (http://www.investpaper.info/tag/economic-growth) empirical analysis (http://www.investpaper.info/tag/empirical-analysis) empirical study (http://www.investpaper.info/tag/empirical-study) factor analysis (http://www.investpaper.info/tag/factor-analysis) financing (http://www.investpaper.info/tag/financing) GARCH model (http://www.investpaper.info/tag/garch-model) Influencing factors (http://www.investpaper.info/tag/influencing-factors) Information disclosure (http://www.investpaper.info/tag/information-disclosure) Insurance (http://www.investpaper.info/tag/insurance) IPO (http://www.investpaper.info/tag/ipo) liquidity (http://www.investpaper.info/tag/liquidity) Listed Companies (http://www.investpaper.info/tag/listed-companies) listed company (http://www.investpaper.info/tag/listed-company) marketing strategy (http://www.investpaper.info/tag/marketing-strategy) Monetary Policy (http://www.investpaper.info/tag/monetary-policy) performance (http://www.investpaper.info/tag/performance) performance evaluation

Pages	134
Price	US$58.00
Buy Now	 (/order /order.php?w=InvestPaper&n=113434&m=58.00)
Download	
Contact	E-Mail:bpaper@live.com TEL:9-358-716-819A
FAQ	**How to get this paper's electronic documents?** 1, Click the "Buy Now" button to complete the online payment 2, Download the paper's electronic document from the successful payment return page/Or the system will send this paper's electronic document to your E-Mail within 24 hours
Favorite	**ADD TO FAVORITE**
Version	zh-cn

Tags: Emamectin benzoate (http://www.investpaper.info/tag/emamectin-benzoate), hydroxyethyl cellulose (http://www.investpaper.info/tag/hydroxyethyl-cellulose), in situ polymerization (http://www.investpaper.info/tag/in-situ-polymerization), microcapsule (http://www.investpaper.info/tag/microcapsule), viscosity average molecular weight (http://www.investpaper.info/tag/viscosity-average-molecular-weight)

← Study of the French Medical Degree System's Characteristics (http://www.investpaper.info/113432_01.html)

Study on Steel Project Investment Risk Evaluation System → (http://www.investpaper.info/113436_01.html)

Comments are closed.

(http://www.investpaper.info/tag/performance-evaluation) Portfolio (http://www.investpaper.info/tag/portfolio) real estate (http://www.investpa/tag/real-estate-2) Real Estate Market (http://www.investpaper.info/tag/real-estate-market) risk (http://www.investpaper.info/tag/risk) Risk control (http://www.investpaper.info/tag/risk-control) Risk management (http://www.investpaper.i/tag/risk-management) Securities Market (http://www.investpaper.info/tag/securities-market) stock index futures (http://www.investpaper.info/tag/stock-index-futures) Stock Market (http://www.investpaper.info/tag/stock-market) strategy (http://www.investpaper.info/tag/strategy) supervision (http://www.investpaper.info/tag/supervision) System (http://www.investpaper.info/tag/system) Trust (http://www.investpaper.info/tag/trust) VaR (http://www.investpaper.info/tag/var) VaR model (http://www.investpaper.info/tag/var-model) Venture capital (http://www.investpaper.inf/tag/venture-capital) Volatility (http://www.investpaper.info

/tag/volatility)

Back to top