



SDI Review Form 1.6

Journal Name:	Advances in Research
Manuscript Number:	2014_AIR_14195
Title of the Manuscript:	Two Approaches for Solving Non-Linear Bi-level Programming problem
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>Line: 47. The fuzzy definition is a very poor English language and must be revised carefully by author.</p> <p>Line: 91-99 : Why should we allocate a penalty for second level (follower) just to convert the problem to a single level problem , since the leader and the follower must be free to act on their own variables in bi-level policy. So how the author can explain the roundness of follower.</p> <p>Line: 99. The author is needed to mention that μ_i is taken as the penalty coefficient.</p> <p>Line : 133-171 : These definition or theorems are very trivial and the proofs can be seen in every elementary calculus books , so I strongly suggests to be removed from the paper.</p> <p>Line: 257 & 258 . There seems to be a contradiction in these two lines , because in line 257 the author has mentioned they reach to a solution in a very less time compare to other references , but in line 258 it is written that they reach to a stability level for both of the variables of x and y after 5000 and 4850 iteration, which is not a less time. So Author must explain this contradiction.</p> <p>Line: 231. Author must mention that from what kind of penalty function it is used in ex:2 .</p>	



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	Line: 262-263. The numerical example is not clear that the second level on what variable is acting.	
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<p><u>Minor</u> REVISION comments</p>	<p>Line: 42. Methodsare..... Methods are</p> <p>Line: 52. Interiorpointmethod..... Interior point method</p> <p>Line: 55. In Interior..... The Interior</p> <p>Line: 65. <u>On</u> using KKT conditions <u>the</u> problem (1)....</p> <p><u>Minor</u> REVISION comments</p> <p>Line: 173. Then for <u>each</u> x in the</p> <p>Line: 183 , 184. at the point “a”</p> <p>Line: 240. With <u>different</u> sizes</p> <p>Line: 241.References of the example in table 4 <u>are as follows</u></p> <p>Line: 272 : with<u>different</u> sizes ...</p> <p>Line: 185: in this formula $P_x = f_a + f_{.a_x} - a$ Tterm $P1x$ is not defined in the previous formula.</p> <p>Line: 260 . Taylor is not an algorithm and it must be changed to Taylor Theorem or Taylor series approach.</p> <p>Line: 270. 6 thousand..... 6000</p> <p>Line: 286. The bestsolution The best solution</p>	
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<u>Optional/General</u> comments	<p>1- Can The author give a general method or solution to his own method , which makes the approach valuable.</p> <p>2- I suggest the author to add the below reference Which is very close to his approach " A new method for solving fully fuzzy linear bi-level programming problems". N . Safaei , M.Saraj .Int j. Of applied operation research. Vol .4 , No.1 , pp. 51-58 , winter 2014 .</p> <p>3- The author must be aware oe this point tjhat the bi-level problems are non convex and N.P hard problems , so to get a global minima is not easy.</p>	
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