Others* contains other solutions methods not often used, such as a Customized heuristic algorithm; Simulation-based evaluation method; a Multi-cut L-shaped based algorithm; a Clonal selection algorithm; exact algorithm based on the trip-chain-oriented set-partitioning; a Partition algorithm; Differential evolution algorithms ; and others metaheuristic algorithm.

We notice that the column generation method is the most used for solving scheduling problems, which is normal because this method solves effectively large linear optimization problems like most variants of the MDVSP; but generates the phenomenon of degeneracy, which must be combated with other methods.

Table 3: Solution methods and the scheduling problems treated.

Solution methods	**The scheduling problems treated**
Genetic algorithm	Uncertain Regional Bus Scheduling Problems; Scheduling and Delivery Problems; Block Transportation Scheduling; Emergency Logistics Scheduling; Location-Scheduling Programming; Maintenance Scheduling of Geographically Distributed Assets; Scheduling Trucks; Multistage Assignment Optimization
2-stage heuristic	A truck Scheduling Problem; Scheduling in Intermodal Transport; Inland-Empty-Container Depot Locations. Transit Stop Inspection and Maintenance Scheduling
Tabu Search	Inland Container Transportation Problem; Scheduling Operations based on Readiness Criteria; Schedules for Sequential Agricultural Operations; A Dial-a-Ride Problem
Variable neighborhood search	Multi-Depot Vehicle Routing Problem; Scheduled Penalty; the Electric Vehicle Scheduling Problem; Bi-objective Orienteering for Personal Activity Scheduling; Bi-objective Orienteering for Personal Activity Scheduling
Column generation	Ship Routing and Scheduling Problems ; Routing and Crew Scheduling Planning; Planning towing processes at airports ; the Multiple-Depot Vehicle Type Scheduling problem; Freight Railway Operator Timetabling and Engine Scheduling; Delay Management in Public Transportation; the Train unit Scheduling Problem; The Multi-Vehicle Traveling Purchaser Problem ; Integrated Operational Transportation Planning Problem ; the Multi-Depot Vehicle Scheduling Problem; the Multi-Period Technician Routing and Scheduling Problem; Optimization of Periodic Crew Schedules; High School Timetabling.

5. CONCLUSION

In the present time, transportation management has become increasingly important, especially when we take into consideration the increase in demography and human development, which generate high demands. Therefore, plants implantations have become exponential to meet these demands, making logistics management difficult in terms of supply, shipping, and transportation of personnel; as there are several modes of transportation, this management becomes much more complicated to manage. In our paper, we are interested in the VRP and MDVSP, because they have a common objective which is to reduce the fleet size and then to reduce the costs. The objective of this literature review is to give an idea about the solution methods that have been used to tackle such problems in recent papers in this area.

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